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A Review of Emerging Tools and Techniques in Physiotherapy Shalini Dixit¹, Bhupesh Goyal², Himanshu Sharma^{3*}, Kanchan Kholiya⁴

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ABSTRACT

Objective: To test families' perceptions of physical therapy provided to loved ones in a vegetative or minimally conscious state. **Methods:** Secondary thematic analysis of 65 in-depth narrative interviews with family members of those in a vegetative or minimally conscious state. **Results:** Families value physical therapy in six aspects: "Caring for people", "Maximizing comfort", "Helping to maintain health/life", and "Creating conditions". Favorable conditions for progress", "Identify or stimulate perception" and "Indicate potential recovery significance". They may have high expectations of what physical therapy can bring, but at times expressed concern about the possibility that physical therapy could cause pain or suffering, or even become a form of trauma. torture mode if they believe there is no hope of a "meaningful" recovery. **Conclusion:** Physiotherapists can make an important contribution to supporting this group of patients and their families, but it is important to realize that families' understanding of physical therapy may differ. significantly different from the understanding of physiotherapists. Both giving and withdrawing physical therapy is highly symbolic and can (unintentionally) send a message to people about the current and future condition of their loved one. True two-way dialogue between practitioner and family about the goals of physical therapy intervention, potential outcomes, and patient best interests is essential to providing good service, establishing rapport positive system, and appropriate treatment.

Keywords: review; physiotherapeutics; emerging tools; techniques

INTRODUCTION

Brain damage is the leading cause of death and disability among young adults in the Western world. Mortality rates range from 30% to 50% in those with severe trauma, and about 30% of survivors end up with significant and long-term neurological impairment, including, in the severe stages. First, disturbances of consciousness. "Disordered Consciousness" is an umbrella term that refers only to the comatose, vegetative, and minimally conscious states (SV and MCS) - where the patient has no, or only minimal, and intermittent consciousness, about itself and its environment. Such disturbances may be temporary or permanent: some patients will experience episodes of coma, vegetative state, and minimal consciousness and appear in full consciousness while others will be in minimal vegetative or conscious state.

The role of the physiotherapist in the acute, rehabilitative or long-term care and treatment of such patients is recognized and discussed in the general medical and therapeutic literature and is regulated in guidelines such as those produced by the Royal College of Physicians in the United Kingdom. Uni, the National Health and Medical Research Council in Australia, and the Multi society Task Force in the United States. These guidelines identify physical therapy as a key specialty within the multidisciplinary group that assesses, diagnoses, and manages this patient population and recommend physical therapy interventions such as aspiration and aspiration techniques. secretions manually (to reduce the risk of respiratory infections or to treat them). has taken place and plastering, splinting, stretching, positioning, and standing procedures (to control abnormal tone, maintain range of

motion and muscle length, and prevent spasticity).

Physiotherapy treatments for vegetative and minimally conscious patients may also aim to facilitate stimulation and postural control, increase pulmonary ventilation, and improve circulation. Physiotherapists may also be involved in the delivery of multisensory stimulation programs that aim to increase levels of arousal and consciousness through stimulation of the reticular activating system and be part of a team. Multidisciplinary assessment of patient consciousness.

LITERATURE REVIEWS

Meriel Norris (2019) Physical contact is considered a fundamental skill in physical therapy, central to clinical reasoning and communication. However, there is still a lack of research on how students learn skills and experiences in the process. The purpose of this article is to explore this learning experience of pre-admission physical therapy students. An approach supported by phenomenological and ethnographic methods was carried out over 8 months at a UK higher education institution. Data comes from a range of observations and focus groups, supplemented by individual journals of reflective learning among freshmen and sophomores. Focus group data were analyzed by topic and triangulated with other data sources. Three themes were developed:

- (1) "Uncertainty, self-perception and anxiety" explores discomfort in the beginning;
- (2) "Emerging familiarity and perception of interaction" represents increasing confidence in bodily abilities and communication skills; and

(3) "Actual exposure in clinical settings" focuses on the transition from preclinical to clinical settings and highlights the cyclical processes of integrative learning.

This study highlights the complexity and immediacy of demonstrated tactile learning and its interactions with professional identity development. Negotiating boundaries, both tangible and intangible, jeopardizes this process during the first two years of the course.

Michel Probst (2012) Physiotherapy in mental health and psychiatry is a recognized specialty in physical therapy. It provides a rich variety of observation and assessment tools and a wide range of interventions related to patients' mental and physical health issues based on evidence-based literature and a 50-year history. Physiotherapy in mental health addresses human movement, function, physical activity, and exercise in individual and group therapy settings. In addition, it links people's physical and mental health needs. This chapter provides general thoughts on mental health, the scope of physical therapy in mental health care, and physical therapy research. Physiotherapy in mental health care and psychiatry can provide added value and benefit for the treatment of people with mental health problems.

Hetil, (2016) Physiotherapy of cancer patients is one of the controversial issues in our country. The first mentioned malignancies are contraindications to physical therapy. To date, physical therapy has not been suggested (or only under limited access) for patients with prior history of malignancy. International medical practice is less restrictive in managing this topic. The development of imaging techniques raises this question in a new light. Based on the evidence, the majority of articles report the beneficial effects of physical therapy on cancer patients, and only a few articles mention its harmful effects. Of course, each patient requires an individual evaluation, however, if the possibility of tumor recurrence and most physiotherapeutic metastasis is excluded, procedures can be safely used. One of the goals of this review is to support physician decisions about prescribing treatments so that more patients can benefit from physical

Cobbe, Sinead; Kennedy, Norelee (2012) There are few international studies on physical therapy in palliative care. This study aimed to profile physiotherapy in palliative care in an Irish setting to inform worldwide practice. The study design included a retrospective examination of files within 6 months. The study took place in a specialized palliative care unit (hospice) in Limerick, Ireland. All patients were discharged (until death or discharge) from January to June 2010. The Edmonton Functional Assessment Tool (EFAT2) was used as an outcome measure. Sixty-five percent were referred to physical therapy; 58% (n = 144) were evaluated and treated. Many patients were referred (mean functional score 11, range 123, SD 5). Rehabilitation activities are extensive: 48% have more than one reported improvement in function; 53% of physiotherapy patients were eventually sent home; 47% of physiotherapy patients died, of which 52% received physical therapy in the last week of life. The mean physical therapy program lasted 11 days (range 1186, SD 22) while the mean number of treatments was four (range 199, SD 10). The most common interventions were gait rehabilitation (67%), conversion exercises (58%), and exercise (53%). One-third of treatments fail because the patient does not have/not enough medication. Challenges for physiotherapists include frequent discontinuation of treatment and large functional fluctuations in patients. There is a high referral rate for physical therapy in this hospice. Functional changes in palliative care patients were mapped, showing that physical therapy is associated with both rehabilitation and quality of life/supportive measures.

The most common treatment methods are physical activity interventions.

McGowan, Emer; Elliott, Naomi; Stokes, Emma (2018) An investigation into the leadership competencies of physiotherapists is needed to help gain insight into current leadership practice and to enable appropriate training programs to be developed. Explore physiotherapist managers' perceptions of their leadership competencies. Semi-structured interviews were conducted with a deliberate sample of 18 physiotherapist managers from a range of public services and private practices in Ireland. The interviews were analyzed using modeling analysis and coding modeling based on the Bolman and Deal Leadership framework, which details four leadership frameworks: structure, human resources, politics, and Icon. Physiotherapy managers have described demonstrating leadership in each of the four leadership frameworks. However, the language used by physical therapy managers suggests that they work primarily through structural and human resource frameworks. The use of skills involved in policy settings varied among participants; some participants described their work within this framework while others noted difficulties. The icon frame has been misused; Few examples are given of skills such as communicating their vision, demonstrating passion, and facilitating a positive work culture. Those responsible for physical therapy work primarily through the structural framework and human resources. To successfully meet leadership needs in their roles, physical therapy managers may benefit from leadership development training specific to leadership development in key settings. values and symbols.

Cobbe, Sinead (2012) There are few international studies on physical therapy in palliative care. This study aimed to profile physiotherapy in palliative care in an Irish setting to inform worldwide practice. Design: Study design including retrospective examination of files within 6 months. Background: The study took place in a specialized palliative care unit (hospice hospital) in Limerick, Ireland. Participants: All patients were discharged (until death or discharge) from January to June 2010. Measuring Outcomes: The Edmonton Function Assessment Tool (EFAT2) was used as an outcome measure. Outcome: 65% referred to physical therapy; 58% (n = 144) were evaluated and treated. Many patients were referred (mean functional score 11, range 123, SD 5). Rehabilitation activities are extensive: 48% have more than one reported improvement in function; 53% of physiotherapy patients were eventually sent home; 47% of physiotherapy patients died, of which 52% received physical therapy in the last week of life. The mean physical therapy program lasted 11 days (range 1186, SD 22) while the mean number of treatments was four (range 199, SD 10). The most common interventions were gait rehabilitation (67%), conversion exercises (58%), and exercise (53%). One-third of treatments fail because the patient does not have/not enough medication. Challenges for physiotherapists include frequent discontinuation of treatment and large functional fluctuations in patients. Conclusion: There is a high referral rate for physical therapy in this hospice. Functional changes in palliative care patients were mapped, suggesting that physical therapy is associated with both rehabilitation and quality of life measures/assistances. The most common treatment methods are physical activity interventions.

T. Mkondo; W. Mudzi; N. P. Mbambo (2017) People enter professions for different reasons and so do physiotherapists. The study aimed to determine the reasons for choosing physiotherapy as a career among physiotherapy students in Zimbabwe. The study used a cross-sectional descriptive design in which a questionnaire was administered to 60 students.

Data were collected on student demographics and also based on their assessment of the importance of 12 influencing factors in their choice of a physiotherapist as a career.

Short, S D (2016) The predominately female healthcare sectors have not developed as strongly as the predominantly male healthcare sectors. This paper suggests that an important factor in shaping the pay, status, and power gaps between medicine and predominantly female occupations is gender. It is suggested that physical therapy has evolved as a profession for middle-class women and that family responsibilities continue to take precedence over professional responsibilities for the majority of physiotherapists. Physiotherapy has a higher occupational reputation than social work, speech therapy, occupational therapy, and nursing and it is suggested that physiotherapists achieved this status through recruitment. employ women from the middle and upper classes. The history of physiotherapy is the history of a bourgeois female profession. Copyright © 1986 Australian Physical Therapy Association. Published by. Copyright Registered.

Ginnerup-Nielsen, Elisabeth; Christensen, Robin; Thorborg, Kristian (2016) To experimentally evaluate the clinical effects of physical therapy on pain in adults. DESIGN: Using meta epidemiology, we report the impact of a "physical therapy" intervention on self-reported pain in adults. For each trial, the between-group difference in the "pain intensity" outcome assessed was the standard mean difference (SMD) with 95% CI. Stratified analyzes were performed according to the patient population (International Classification of Diseases 10), type of physiotherapeutic interventions, their interactions, as well as comparison group type, and risk of bias. Body quality "No interference" or a simulated design has been selected. Only articles written in English are eligible. RESULTS: A moderate overall effect of physical therapy on pain corresponding to 0.65 SD units (95% CI 0.57 to 0.73) was found based on a moderate inconsistency (I (2) = 51%). Machining.

Borough A.; Alberti V.; Avlakiotis K.; Spanos S. (2012) The educational environment has a serious effect on the mental health of students. There is little data on the mental health of physical therapy students. Objectives: This study aimed to assess the mental health of undergraduate physical therapy students during the 3rd year of the study. Materials and methods: 80 physical therapy students from semesters 5 and 6 of the undergraduate physical therapy department completed the GHQ28 questionnaire. Comparison between groups w.

Probst, Michel (2017) Physiotherapy in mental health and psychiatry is a recognized specialty in physical therapy. It provides a rich variety of observation and assessment tools and a wide range of interventions related to patients' mental and physical health issues based on evidence-based literature and a 50-year history. Physiotherapy in mental health addresses human movement, function, physical activity, and exercise in individual and group therapy settings. Besides, he's stupid.

Shaw, James A; DeForge, Ryan T (2012) Theories about how to find and apply knowledge in clinical practice are often referred to as the epistemology of practice and have not been widely explored in the physical therapy profession. Thus, unwritten assumptions about what is considered knowledge in physical therapy are the basis of many approaches to information gathering and use in practice. The objective of this paper is to propose an epistemology of physical therapy practice that, through the concept of the hard worker, offers an alternative approach

to understand how to better understand the knowledge associated with physical therapy. regarding physical therapy. The term handyman refers to a handyman or handyman who uses all the tools and types of knowledge available. The concept of physiotherapists as do-ityourselfers recognizes that all factual knowledge takes place within the social, cultural, and historical contexts that shape our beliefs about what is as important as knowledge in physical therapy. This recognition leads physiotherapists to act as tinkerers embracing a variety of epistemologies, uncovering new ways to know and clinical reasoning strategies to deliver a holistic approach. than for physical therapy practice. Then, the relationships between expertise in clinical reasoning and diligent person epistemology are discussed, explaining the usefulness of many epistemologies in the care of emergent physiotherapists. sharp. A tinker's epistemology was then applied to the concept of physical therapy expertise, destabilizing the idea that a single authoritative approach to physical therapy practice should be ideal. chemical.

Firoz Ahmed Mamin (2018) This article describes the current state of physiotherapy in Bangladesh. Physiotherapy is not recognized as a profession by the government. There is no single registry and governing body. The majority of Bangladeshis do not perceive the health and economic benefits of physical therapy. Covered Areas Burden of disease is changing and Bangladesh needs a profession specializing in physical rehabilitation to deal with these challenges. This article describes the overall patient and economic benefits of a comprehensive physiotherapy regimen for all Bangladeshi citizens. It describes many obstacles facing the profession. Conclusion Physiotherapy is effective in many post-traumatic and long-term situations. There is economic evidence to support the provision of physical therapy as a costeffective treatment that should be considered part of universal health service delivery.

Mamin, Firoz Ahmed; Hayes, Rieke (2018) Demand for health services in developing countries often exceeds supply. This article describes the current state of physiotherapy in Bangladesh. Physiotherapy is not recognized as a profession by the government. There is no single registry and governing body. The majority of Bangladeshis do not perceive the health and economic benefits of physical therapy. The burden of disease is changing and Bangladesh needs a profession specializing in physical rehabilitation to deal with these challenges. This article describes the patient and broader economic benefits of a comprehensive physical therapy regimen for all Bangladeshi citizens. It describes many obstacles facing the profession. Physical therapy is effective in many posttraumatic and long-term situations. There is economic evidence to support the provision of physical therapy as a cost-effective treatment that should be considered part of universal health service delivery. Formal recognition of the protected title "physician of physiotherapist" and a single registry and regulatory body is recommended.

CONCLUSION

Families consider physical therapy and physical therapy to play an essential role in the care of their loved ones. Their outlook depends and is inextricably linked with their parents' current levels and levels of awareness and the possibility (and beliefs about) future "meaningful" recovery. Understanding the many different interpretations families have of physical therapy and its practices is essential to developing positive relationships with families of people in a vegetative state. or minimally conscious and caring for loved ones. Physiotherapists should know that both their actions and inactions - for example, withholding services - have symbolic power.

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