



PERSPECTIVE PUBLIC HEALTH, PHYSIOTHERAPY

Physiotherapy – An Effective but Underutilized Strategy for Strengthening Public Health

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ABSTRACT

There are several growing public health issues that physiotherapy can help to effectively manage, including low back pain, disabilities, physical inactivity, and diabetes, but access to physiotherapy is limited due to staff shortages and policies. These issues are an economic burden to individuals, employers, and health systems, they lead to many non-communicable diseases, health inequities, and poverty. Access to rehabilitative services such as physiotherapy is essential in maintaining or improving the health and socioeconomic status of patients. Physiotherapists keep people moving and have the highest clinician-patient contact time which makes them the ideal clinicians to incorporate physical activity counseling and health promotion strategies. Physiotherapy also positively contributes to health economics; it helps persons to improve their function and return to work following injury and illnesses, which means they can contribute to healthcare funding mechanisms. Physiotherapy also contributes to healthcare efficiency by decreasing the need for costly investigations and interventions, and results in positive outcomes for elderlies decreasing their need for medical care, this means funds can be directed to other urgent healthcare needs. Improving access to physiotherapy services is key to strengthening public health.

Keywords: Healthcare Services, Physical Therapy, Physiotherapy, Public Health, Rehabilitation Services

INTRODUCTION

The future of public health relies on implementing and prioritizing strategies that are proven to be effective and cost-efficient. This will also require a shift of focus from traditionally prioritizing the physicians' role to other professions such as physiotherapy, occupational therapy, nutrition & dietetics, and social workers. Physiotherapy in particular carries many benefits for public health in addressing major issues such as chronic pain, low back pain, disability, non-communicable diseases (NCDs) and associated impairments, and physical inactivity. Access to physiotherapy also contributes to improved efficiency in the health system. Physiotherapy contributes to protecting and improving public health, but is limited by challenges of low staff recruitment, and poor governing policies; strategies and policies are needed to address these issues.

Major Public Health Issues and Physiotherapy

Low back pain is described as a global epidemic, the leading cause of disability affecting an estimated 619 million people (approximately 10% of the global population) in 2020 and

projected to be 843 million in 2025; medical care for this condition is costly, it contributes to worker absenteeism, and access to effective non-pharmacological treatment such as rehabilitation is limited.^[1] Low back pain is a public health and an economic burden, the effects of it are experienced by both the population and policymakers in health and government. A recent meta-analysis^[2] indicated that physiotherapy treatment approaches are one of the most effective strategies to decrease pain and disability among persons affected by chronic low back and neck pain.

Disabilities are significant public health issues; they affect approximately 16% of the population; disabled persons have higher rates of premature mortality, significantly increased risk of comorbidities such as diabetes, obesity, stroke, and depression; encounter health inequities such as expensive transportation costs (barrier to healthcare), stigma, discrimination, loss of jobs, less employment opportunities, and resultant poverty.^[3] There are many other physical disabilities apart from low back pain, for example: cerebral palsy, birth defects/congenital neurological conditions, strokes, spinal cord injuries, amputations, and major injuries affecting the musculoskeletal system. Persons affected by these conditions can greatly improve their quality of life, function, and independence once they receive the appropriate physiotherapy and rehabilitative care, this will help to reduce some of the inequities in healthcare they face such as transportation, ability to work, decrease their risk of poverty and increased physical activity can benefit their health and decrease the likelihood of developing secondary NCDs.

Physical inactivity is a leading risk factor for premature morbidity, and several preventable NCDs such as stroke, diabetes, depression, and heart disease (~ 499,000,000 new cases by the year 2030 if the current prevalence does not decrease) cost health systems billions of dollars yearly.^[4] Physiotherapy is the primary profession that helps to get people moving, and returning to or improving physical function. Lack of access to physiotherapy will suggest that persons who become ill, injured, or affected by physical disabilities will have decreased movement potential, which will then add to the burden of physical inactivity, increasing their risk of developing NCDs or worsening morbidity, which then further burdens public health. Physical activity counseling is an important strategy in health promotion, however, a challenge that faces many clinicians is their limited time with patients; however, an added benefit of physiotherapy is that clinicians may spend anywhere between 1 and 2 hours with a patient, which allows for more contact time to convey behavior change messages and follow up on progress in subsequent sessions while assisting patients to become confident and adapting to increased physical activity participation. This advantage is not shared by other clinicians.

Diabetes Mellitus is another significant public health issue, with over 422 million cases globally, and is the main cause of premature death, cardiovascular diseases, kidney disease, and amputation, and this information is well known.^[5] Advances in healthcare have contributed to persons with diabetes living longer, however, these persons have an increased risk of musculoskeletal disorders such as osteoarthritis, hip fractures [and other complications],^[6] which are less discussed as public health issues compared to the other complications mentioned earlier. The increased risk of developing musculoskeletal complications is another indication that there will be an increased demand for health services that address musculoskeletal conditions, a major one of which is physiotherapy, which will help in decreasing pain, increasing function, and maintaining physical activity levels to prevent the worsening of diabetes.

Health Economics and Physiotherapy

The funding of healthcare depends heavily on two main sources: tax funding and insurance (private or social). Disability from injuries, NCDs, low back pain, and neurological issues, as highlighted earlier does not only affects one's health, but also their ability to work and some persons face termination of employment, which can mean they no longer contribute to tax revenues and/or insurance schemes, and on a larger scale affect healthcare funding; but provision of services such as physiotherapy can help affected individuals to become functional and gainfully employed.

An aging population is also a concern for the future of health systems, as people are living longer past retirement age and with a high prevalence of NCDs, these persons may become a burden to health systems in that they need more care and contribute less to healthcare funding. Physiotherapy provided for the elderly population decreases their likelihood of being physically inactive or becoming dependent, and decreases their risk of morbidity and mortality, hence decreasing healthcare costs.

Healthcare cost efficiency is another major concern in health economics and public health. Access to physiotherapy services has resulted in decreased hospital stay and post-discharge care.^[7] Direct access to physiotherapy has also resulted in a reduction of physician-related expenses, unnecessary investigations and less cost-effective interventions.^[8,9] This contributes to more efficient use of funding for healthcare. An example of this would be appropriate physiotherapy assessment of low back pain, which results in less use of X-rays and MRIs, less referral to orthopedic care, and appropriate physiotherapy treatment that decreases the need for opioids and spinal surgeries, which costs more, recent studies within the United Kingdom have also confirmed these benefits.^[10]

Underutilization of Physiotherapy

Physiotherapy is an effective strategy in many domains of public health. However, this service in healthcare is generally underutilized and some instances undervalued. Physiotherapy in many jurisdictions is still restricted to secondary healthcare despite potential benefits at the primary level previously mentioned such as preventing and reducing the risk of complications and secondary diseases, hospitalization, and costly investigations and treatments. This restriction is mainly because of archaic policies and laws, not many physiotherapists have branched into public health or have become involved in policy development or advocating for changes in law. The multiple streams framework for policy analysis developed by John Kingdon (1984) shows that the window for policy development is when problems, policies, and politics converge; but very rarely the issues of physiotherapy received political attention and not often physiotherapists have been prepared or trained in policy development. There needs to be professional development for physiotherapists in the areas of public health policy and law, more physiotherapists should be encouraged to matriculate in postgraduate studies such as public health and health administration and management to equip them with the knowledge, training, and experience needed. This will help the profession to better navigate the political landscape. The American Physical Therapy Association has seen results in this effort because of steady consistent efforts and strategic actions over decades. Additionally, issues affecting physiotherapy can receive greater political priority or agenda-setting, if it forms a part of collective rehabilitation needs within its jurisdiction.

Senior health professionals holding to traditions that patients must be referred to physiotherapy contributes to underutilization. Direct access to physical therapy is still not allowed in many countries; however, a systematic review has shown this model of care is safe, less costly, and more reliable compared to traditional models of care.^[9] Physical therapy education and training are rapidly evolving, with the past decade seeing a greater push for evidence-based practice, physiotherapists have the capacity to properly assess, diagnose, develop rehabilitation plans, and make prognoses for patients. Many senior healthcare professionals still have this notion that physiotherapists are like technicians, they must be told what to do and must be given a diagnosis to conduct their sessions and sometimes this is enforced by law. In these settings, for example in the Caribbean, healthcare workers and doctors with little appreciation of the advancing scope of physiotherapy have missed many opportunities to refer appropriate patients or failed to request physiotherapy services where it was much needed. There needs to be greater incorporation of a multidisciplinary and interdisciplinary approach to

healthcare; and possible incorporation of roles and scope of members of the healthcare team in tertiary education for undergraduate medical sciences programs.

Another limitation is that in many jurisdictions, there is a shortage of physiotherapists, where the supply is not meeting the growing demand. Physiotherapist can tell that their work has changed many lives, however, this work many at times has not been captured and published, or any monitoring and evaluation projects have been done to quantify the impact of physiotherapy in most health systems. Most other professions/departments may be complaining as well that they are short-staffed, and physiotherapy may not get the attention or given priority for the same reason the departments are usually small in numbers and do not have enough advocacy and support. Physiotherapists must engage in more research to quantify the value they are adding to health systems, and to help create stronger evidence to justify the expansion of staff.

CONCLUSION AND IMPLICATIONS FOR TRANSLATION

Despite the many potential benefits of physiotherapy as a public health strategy, the contribution of this service is impaired by the aforementioned factors and challenges. Policymakers and healthcare leaders need to critically review the available evidence surrounding the profession and expand the services to assist in decreasing the burden of low back pain and other disabilities, preventing secondary complications such as the development of NCDs, improving physical activity levels through health promotion and improving movement confidence, managing musculoskeletal complications arising from diabetes. The expansion of physiotherapy services will also result in increased efficiency in the healthcare system, which means more funds could be made available to attend to other public health needs.

Key Messages

1. Physiotherapy can be a useful strategy in addressing major public health issues such as low back pain, disabilities, physical inactivity, and diabetes mellitus and its associated musculoskeletal complications.
2. Healthcare efficiency can be improved with the expansion of physiotherapy services.
3. Physiotherapy keeps people working enabling them to continue contributing to tax revenues or insurance schemes that are important for financing health services.

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