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CORRESPONDENCE

The advantages that the presence of academics physiotherapists could bring both to the formation of the students and to patient care

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PhD in 2001, Associate Professor since 2010, Department of Women's and Children's Health, at the Karolinska Institutet in Stockholm. Clinical work 80%, 20% research including own studies, supervision of doctoral studies and teaching.

As in all professions, also physiotherapy has the responsibility to question their methods, however not all PT:s have to accomplish a PhD program! But all need a basic methodological education (master). A integrative work of scientists and clinicians is preferable, to reach as high as possible evidence based work.

PETER BECKERS

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As a physiotherapist and manual therapist I am involved in research at the Free University of Brussels (experimental anatomy).

Because of the importance of evidence based practice in the interest of the patient, government and therapist regarding efficacy, safety and costs it is obvious that physiotherapy stays within the academic community.

Our profession is very recently starting to be backed up with evidence for certain treatments and also are there certain treatments being banned because of ineffectiveness which proves

the translation to the field of practice. At the moment many guidelines are being developed which are very helpful to give the patients the best care possible. All this is not possible without decent research.

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PHYSIOTHERAPY'S ROLE WITHIN THE UNIVERSITY: RAISING THE GLOBAL AWARENESS OF GOVERNMENTS AND THE PUBLIC

This is not only a strong letter in support of scholarly departments of physiotherapy positioned at leading universities in the world including Italy, but also this needs to be implemented immediately, if not already in place.

Contemporary physiotherapy as an established evidence-based health profession

My name is Professor Elizabeth Dean. I have been on faculty for over 30 years at the University of British of Columbia, Canada, in the Faculty of Medicine, Department of Physical Therapy. My research focuses on knowledge translation and capacity strengthening of health services delivery systems to align professional health services with epidemiological need, hu-

man resources, and economics. Over my career, I have been invited to over 30 countries and many on multiple occasions in this capacity.

I am a physiotherapist by profession. Physiotherapy has emerged as the third largest established health profession in the world (excluding pharmacists and dentists). Common in the first half of the 20th century, physiotherapists were defined largely by 'techniques' and applying these in a biomedical manner to people with injuries and chronic conditions (at that time largely musculoskeletal and neurological). Since the 1950s, physiotherapy has embraced the World Health Organization's definition of health (i.e., Health is a state of complete physical, social and emotional wellbeing) and the International Classification of Functioning, Disability and Health, which is based on the global definition of health. These have been advocated by the World Confederation for Physical Therapy for over ten years with a decree to its member countries, of which Italy in one, that these values are consistent with the values and mission of physiotherapy 'health and participation for all'. These values that inform contemporary physiotherapy practice have had a profound influence on the directions of the profession this century.

The University of British Columbia, ranked in the top 30 universities in the world, has had a long-standing strong commitment to 'excellence in health care', and has been acknowledged globally for such excellence, including a Nobel prize winner, Michael Smith. The Department of Physical Therapy has been a part of the Faculty of Medicine at the University of British Columbia for almost 60 years. This is comparable to many other leading universities in Canada, and increasingly around the world. Initiatives from this department include three Physical Therapy Summits on Global Health which have been responsible for aligning physical therapy care globally, practice, professional education and practice with societal need. In addition, the department is one of the most productive in the Faculty of Medicine. Faculty members have had a consistently productive publication rate in high quality journals, and secure multi-million dollar grant funding annually.

For 30 years, the World Health Organization

has sounded the alarm bells regarding the epidemic of lifestyle-related non-communicable diseases including ischemic heart disease, hypertension and stroke, cancers, type 2 diabetes mellitus, obesity, and smoking-related conditions such as chronic obstructive lung disease, and has long pronounced that these are 'largely preventable'. Given this global epidemic of lifestyle-related non-communicable diseases, what does the scientific literature report is the most effective and inexpensive way to prevent, reverse as well as address them?

The non-pharmacological interventions of physiotherapy, e.g., health education and exercise, are unequivocally the 'best' evidence-based interventions for preventing, reversing in many instances, as well as managing these dire costly conditions. Particularly for chronic stages of these conditions, these interventions have often been reported to surpass medical and surgical interventions in the long- as well as short-term. This is true regardless of whether a patient is being seen by a physiotherapist for a musculoskeletal or neurological condition, as people with these conditions (even children) have risk factors for these conditions, if not their costly manifestations. Physiotherapists as the leading non-pharmacological health profession in the world have a primary responsibility to promote evidence-based non-pharmacological interventions.

Unequivocal benefits of exploiting non-pharmacological physiotherapy interventions

— Non-pharmacological physiotherapy interventions, e.g., health behavior change education and exercise, are the interventions of choice, i.e., constitute 'best' evidence-based practice, to prevent, in many cases reverse as well as manage lifestyle-related non-communicable diseases that most Italians are dying from or are living with for many decades, resulting in enormous social and economic burdens to Italian societies.

— Non-pharmacological physiotherapy interventions can better assure lifelong health and wellbeing; and have the promise of keeping people in the workforce for their working lives, supporting their families, and needing less costly medical care over the course of their lives.

— The exploitation of non-pharmacological physiotherapy interventions are strongly supported on ethical grounds. It was Socrates who 2500 years ago wisely stated ‘First do no harm’, and ‘It is better to prevent disease than to restore a person to health after they have the disease’.

Maintaining the status quo or moving forward

Some politicians and policy makers may wish to support a costly illness care system with short term solutions, i.e., simply addressing signs and symptoms with medications, without the same rigorous and systematic attention to evidence-based non-pharmacological interventions to address underlying causes and contributing factors. Physiotherapists argue this is not only an unacceptable emphasis of care, but that it is ethically questionable. Without addressing the underlying causes and contributing factors in a systematic evidenced-based manner, the epidemic of lifestyle-related non-communicable diseases will not continue to be the leading causes of premature death and disability in Italy, but will escalate further. Even if politicians opt for this road, it is fundamentally economically unsustainable, given lifestyle abuses are only worsening not improving without a systematic approach to exploiting the competencies of non-pharmacologic health professionals to not only address, but help lead on the assault on these largely preventable conditions.

Politicians and policy makers may also argue that Italy can draw upon the scholarship and research reported by physiotherapy scholars in other countries like Canada. Although all countries do this to varying extents, Italy is uniquely positioned to lead rather than follow in the assault on lifestyle-related non-communicable diseases for several important reasons.

First, Italy is home to one of the small number of Blue Zone areas of the world, Sardinia. Blue Zone countries are those with a high proportion of people living over 100 years and living active lives. We need physiotherapy scholars in Italy to translate and implement the knowledge about the Sardinians to the general public in Italy as well as globally, to maximize health across borders. Second, Italy is one country known for the Mediterranean diet which researchers have associated with

unequivocal health benefit and healthy aging. The problem in Italy is the move away from the traditional Mediterranean diet to a more western diet which is notoriously un-nutritious (high fat, sugar and salt, and processed foods) and a major contributor to western lifestyle diseases.

With the promotion of physiotherapy scholarship in Italy, Italian physiotherapists could lead globally with respect to effectively promoting healthy lifestyles for people with chronic musculoskeletal and neurological conditions as well as for those without these conditions. In the former instance, people living with health conditions and disabilities need particularly exceptional health to thrive living with these conditions over many years.

Lastly, Italians have a strong reputation for loving their families and their children. Their children however are cumulating more lifestyle disease risk factors and, in many instances, can look forward to a lifetime of poor health. Biomedicine will be able to provide drugs to offset the signs and symptoms, and perhaps ensure many decades of life. But people living with chronic conditions when the causes and contributing factors can be addressed, is not ‘best’ health care in the modern world. Italian children can look forward to lives plagued with conditions such as obesity, type 2 diabetes mellitus and its multisystem complications. This will impact their employability and capacity to be productive members of society. This is hardly quality of life and places undue burden on others in society.

Recommendation

Without question, the Italian physiotherapy community warrants being positioned in the leading universities of Italy to further advance the cost effective practice of non-pharmacological interventions specifically, health education in the Italian context and exercise, to address its and global health priorities. The world needs an Italian voice to better translate knowledge from those areas of its culture that have been well documented to be associated with exceptional health and health outcomes, and long healthy productive lives. The rest of the worlds as well as Italy would benefit greatly.

ALEXANDRE DIAS LOPES

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Unfortunately, there are a lot of interest involved with these very bad decisions. I completely agree that the Italian physiotherapist need more respect and space in the Italian society.

I am an Associate Professor at City of Sao Paulo University, Physical Therapy Department. I spend 30% of my time with lectures and 70% with research.

In Brazil, the physiotherapists have no restriction in the university system. The undergraduate course in physical therapy has a duration of 4 years. We have 14 master and doctoral programs in Physical Therapy. There are a lot of PT as Head of Department in many universities.

I believe that we only have one way to deliver a worth service in physical therapy for any society: we need researchers and professors in the physical therapist field.

GRACE DOREY

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I am now an Emeritus Professor of Physiotherapy (Urology) from the University of the West of England. I used to teach physiotherapists about male and female incontinence.

I also supervised PhD students

I also lectured in my special subject of Male Incontinence and Erectile dysfunction.

I have lectured in Rome!

MARK ELKINS

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I am a Clinical Associate Professor at Sydney University and a Senior Research Physiotherapist in the Department of Respiratory Medicine at Royal Prince Alfred Hospital. My clinical research interests include interventions to improve the health and quality of life of people

with respiratory disease, particularly cystic fibrosis.

I coordinated the national clinical trial establishing the long-term effect of hypertonic saline for cystic fibrosis, which improves the effect of physiotherapy for airway clearance and three other multi-centre trials in respiratory disease. I am an author on four Cochrane systematic literature reviews about interventions for CF lung disease.

I have supervised postgraduate students in medicine, physiotherapy and speech pathology. I have been editor-in-chief of *Journal of Physiotherapy* for 4 years, with increases in the Impact Factor to 2.9 and in total submissions over this period.

At the George Institute for Global Health, I am one of the co-directors of an online database of scientifically rigorous research to guide clinical physiotherapy management (www.pedro.org.au). The site contains over 28,000 randomised trials, 4,000 systematic reviews, and 400 clinical practice guidelines. All trials on the database are independently assessed for quality. These quality ratings are used to quickly guide users to trials that are more likely to be valid and to contain sufficient information to guide clinical practice. Currently, 1000 users/day from over 80 countries perform more than 1 million searches per year.

I currently supervise 2 PhD students, 2 Masters students, and 1 visiting research fellow, and I supervised another 4 post-graduate students (1 PhD, 2 Masters, 1 Honours). All completed students, both current PhD students, both current Masters students and the current visiting fellow have published during their candidature.

Physiotherapists make an extremely strong contribution to Academia in the Australian university system. The high academic standards of the profession are reflected in the academic scores required for entrance into the physiotherapy courses, which are in the top 1-5% of high school graduation scores for most physiotherapy schools. I don't have data on the number of physiotherapists with PhDs in Australia but you could E-mail each of the physiotherapy schools and ask for a tally over the years. Un-

“Sciences of Human Movement” (Bachelor in Physiotherapy) and in “Neurological Rehabilitation” (Bachelor in Neurophysiopathology Techniques, Specialisation Schools in Neurology, Pneumology and Occupational Medicine).

I follow a number of National and International research projects and I am a member of the Editorial Board of the *Italian Journal of Physiotherapy*, *Scienza Riabilitativa* and the *International Journal of Physical Therapy and Rehabilitation*.

I am manager of the Rehabilitation Health Professions at the Azienda Policlinico S. Orsola-Malpighi in Bologna.

In my opinion this is the key point for improving of the quality of health professionals education that will be achieved only when the education processes will be managed by persons who belong to the specific health profession. As a consequence, the access to the academic world by researchers of the health professions would also lead to an improvement of the cultural and scientific level of the professions themselves, which in turn would have a clear positive impact on the quality of services offered by our health care system. At the same time, however, the culture of the scientific research needs to become more and more widespread in health professionals so that this culture will allow the development of knowledge and skills, in close liaison with the more advanced professional and scientific community in other countries.

NIKKI J. PETTY

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I work in the School of Health Sciences, University of Brighton, UK. My job title is Principal Lecturer. My roles include Course Leader of an Masters in Clinical Research, oversee National Institute of Health Research funding (national level) within the School, manage some School Research Funding, and teach at Masters and

Doctorate level. I supervise around 6 doctorate students as well as masters research students. I have written two textbooks in musculoskeletal physiotherapy and write papers for peer reviewed journals. I sit on university and school committees.

Physiotherapists are lecturers in the university and take a full part in influencing university, faculty and school level decisions.

Bringing the education of physiotherapists into Universities is critical for the opportunity to develop a researching and critical evaluative practitioner in the workplace. The university provides a lively and dynamic opportunity for staff to carry out research and contribute to physiotherapy knowledge. Their activities in research are used within all teaching at all levels and thus research informs the curriculum. Lecturers thus act as role models for students and heighten their awareness of the need to be critical of practice and to implement evidence based practice. In addition the standing of the physiotherapy profession is enhanced by a university profile. Opportunity for research and professional practice to be shared and for joint research projects that cut across professional boundaries is provided. For example physiotherapy lecturers will meet, share knowledge and may carry out a joint research study with pharmacists, sports scientists, social scientists and medics. Being in the university enables physiotherapy education to span all academic levels from BSc to MSc to PhD and this is of fundamental importance for the physiotherapy profession and development of professional knowledge and practice.

IOANNIS POULIS

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I am currently Assistant Professor of Physiotherapy at the Technological Educational Institute of Central Greece, Greece's vocational college for the non-medical therapeutic sciences.

After my studies in “La Sapienza” I began my career as a Physiotherapist in Naval Hospital at Athens, Greece. In 2003 I became Lecturer in Physiotherapeutic Sciences at the Technological

Educational Institute, School of Healthcare Professions, Department of Physiotherapy, where I have been teaching different modules like Kinesiology, Clinical Musculoskeletal disorders, Physiotherapy assessment; as well, I should like to note, Bioethics in Physiotherapy, a new module I introduced to the curriculum.

Teaching all these different parts of the physiotherapy profession has given me a clearer perspective about the educational needs of our profession as therapists. Moreover, for some of the modules like Musculoskeletal disorders, and bioethics that I have been teaching for nearly 10 years. Since I have worked in both public and private physiotherapy schools I was able to answer in a different way to different students' needs. I have promoted different teaching and learning approaches and material, trying to create not only understanding but also interest and enthusiasm amongst our students.

Through collaboration with other universities we managed to compare our teaching activities and to adapt what we consider some of the best standards in Europe. We have recently been evaluated: the standard of education provided by the Department of Physiotherapy at TEI Lamia is equivalent to Level 6 within the European Quality Framework.

I had the luck to be a member of both teams that started the branch of TEI in Lamia and the department of physiotherapy in European Uni-

versity of Cyprus. I have tried throughout to contribute to the best of my ability to program development at both institutions.

NICK WORTH

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I wanted to reply to your request for information relating to Physiotherapists in Academic institutions.

I am the module lead for the Lower Limb as part of an MSc in Trauma and Orthopaedics from Salford University in Manchester. For the past 5 years I have also been an online tutor to Physiotherapists taking an MSc in Sports Physiotherapy at Bath University.

I have worked in Elite Professional Football for the past 20 years and also teach musculoskeletal medicine (assessment and treatment of injuries) to Physiotherapists alongside Doctors.

I have worked with a wide variety of Physiotherapists of different nationalities, including those from Italy - and they mention that the post-graduate education - especially in sports injuries, is not well catered for.

Please let me know if I can help out in any way - in particular by reviewing any sports medicine education and teaching at any time.