

Åsa Bartonek

Karolinska Institutet, Stockholm, Sweden

[Your personal involvement in scientific and educational activities]

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.

[Your opinion on the advantages that the presence of academics physiotherapists could bring both to the formation of the students and to patient care]

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

Free University of Brussels, Belgium

[Your personal involvement in scientific and educational activities]

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

[Your opinion on the advantages that the presence of academics physiotherapists could bring both to the formation of the students and to patient care]

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.

Elizabeth Dean

Professor, the University of British of Columbia, Canada.

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, human 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 is 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

Associate Professor, City of Sao Paulo University, Brazil.

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.

[Your personal involvement in scientific and educational activities]

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.

[The type of involvement of physiotherapists in the university system of your Country]

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.

[Your opinion on the advantages that the presence of academics physiotherapists could bring both to the formation of the students and to patient care]

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.

Mark Elkins

University of Sydney

[Your personal involvement in scientific and educational activities]

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.

[The type of involvement of physiotherapists in the university system of your Country]

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. An editorial shows the growing success of academic physiotherapists in obtaining research funding (1)

[The involvement of physiotherapists to academia worldwide]

Physiotherapists make an extremely strong contribution to academia worldwide, as evidenced by the growth in the number of randomised trials, systematic reviews, and clinical practice guidelines indexed on the Physiotherapy Evidence Database (PEDro) website (2). PEDro is supported by 26 national physiotherapy associations because they recognise the value of this free resource for evidence-based physiotherapy. Physiotherapists have also made an outstanding contribution to the Cochrane Collaboration, as detailed by a recent editorial (3)

[Your opinion on the advantages that the presence of academics physiotherapists could bring both to the formation of the students and to patient care]

The World Confederation of Physical Therapy lists summaries of the top physiotherapy speakers at the upcoming congress in Singapore in 2015. (4) These summaries indicate many of the achievements of physiotherapists in improving education of physiotherapy students and improving the physical function and quality of life of patients. The International Society of Physiotherapy Journal Editors showcases some important efforts that physiotherapy journal editors are undertaking to improve the standards of physiotherapy research, such as introducing mandatory prospective clinical trial registration (5,6)

1. Hodges P. Growth of physiotherapy research funding in Australia. Aust J Physiother 2009;55:149-150.
2. <http://www.pedro.org.au/italian/downloads/pedro-statistics/>
3. Green S, McDonald S, Holland AE, Elkins M. Informing physiotherapy decisions with reliable evidence: how physiotherapists have contributed to Cochrane and how Cochrane has informed evidence-based physiotherapy. J Physiother 2014;60:1-4
4. <http://www.wcpt.org/congress/speakers>
5. http://www.wcpt.org/ispje/help_for_editors
6. <http://www.wcpt.org/ispje/membership>

J. Haxby Abbott

Associate Professor, Sir Charles Hercus Health Research Fellow
Centre for Musculoskeletal Outcomes Research, Orthopaedic Surgery Section, Department of Surgical Sciences, Dunedin School of Medicine, University of Otago, New Zealand.

[Your personal involvement in scientific and educational activities]

I am associate professor at the University of Otago. My research focuses on the management of musculoskeletal conditions and is based in the disciplines of clinical epidemiology, outcomes research and health technology assessment. I have conducted several randomized clinical trials and cohort studies, and I am currently collaborating on a number of projects with researchers from institutions in Australia and the USA. I have supervised 10 research graduate degree students to completion (5 PhD) and a post-doctoral fellow, contributing to increase research capacity in clinical research.

[The type of involvement of physiotherapists in the university system of your Country]

In New Zealand, physiotherapy moved from a 3 year polytechnic diploma to a 4 year university degree around 1994-1997. From around that time a much greater number of physiotherapists have completed higher research degrees (such as PhD), as well as clinical post-graduate degrees (such as Masters).

There are now physiotherapists working in many departments and schools of New Zealand universities. I work in the Orthopaedic Surgery department of a Medical School. There are several other physiotherapists working in other departments of the medical school, including epidemiology, women's health, and bioethics, as well as in the Law School and the division of Higher Education (tertiary teaching specialists).

[Your opinion on the advantages that the presence of academics physiotherapists could bring both to the formation of the students and to patient care]

This has driven up the quality of education and of practice of physiotherapy in New Zealand to a very large degree. Gradually practice is becoming much more evidence-based, more efficient, and more respected by medical doctors, funders and the patient population.

Best wishes for furthering the role of physiotherapists within universities in your country.

Susan Hillier

Associate Professor, Neuroscience and Rehabilitation

Associate Head of School: Research

International Centre for Allied Health Evidence | Sansom Institute of Health Research

School of Health Science | University of South Australia

[Your personal involvement in scientific and educational activities]

I am an academic Physiotherapist working 0.8 full time and 0.2 as a clinician in private practice. My academic load is substantively 40% teaching, 40% research and 20% administration in the academic art of my job.

[The type of involvement of physiotherapists in the university system of your Country]

All universities with physiotherapy programs (bachelors and masters) employ physiotherapists to teach. More and more the physiotherapists employed have a PhD (research) or at least a Masters (coursework in a specialty area). My university employs about 30 physiotherapists in full and part time capacities for our three programs.

[Your opinion on the advantages that the presence of academics physiotherapists could bring both to the formation of the students and to patient care]

Our teaching and research has benefitted enormously from having a higher standard of academic physiotherapist (ie with PhD) – we are contributing to our evidence based.

Mira Meeus

Associate professor in physiotherapy, University of Antwerp and Ghent University

I think you set up an important initiative that I'd like to support!

[Your personal involvement in scientific and educational activities]

I am a full time associate professor at the Ghent University and the University of Antwerp, both at the departments of Rehabilitation Sciences and Physiotherapy. Most of my professional time is spent at teaching our Belgian physical therapy student, who are all at Master of Science level after 5 years of study, and conducting scientific research. The latter mainly encompasses supervising PhD candidates in the rehabilitation Sciences and Physiotherapy.

[The type of involvement of physiotherapists in the university system of your Country]

In Belgium, we have a long tradition of university-based physiotherapy education. In fact, years ago all university colleges lost their licence to teach physiotherapy. Nowadays, only universities are allowed to teach physiotherapy. The Belgian law stipulates that a practicing physiotherapist should have a master of science degree in rehabilitation sciences and physiotherapy to enter the profession. This is not only necessary to conduct evidence based medicine, but also to be a full medical caregiver, able to provide care, starting from a profound diagnosis to evidence based treatment and evaluation of the process.

Moreover, our masters are able to choose for a scientific or even academic career. This implies that most of the assistants, researchers and professors at the physiotherapy education are physiotherapist themselves.

[Your opinion on the advantages that the presence of academic physiotherapists could bring both to the formation of the students and to patient care]

I do hope that the position of physiotherapy within Academia in Italy will improve. Physiotherapy needs its independent place in both health care and Academia, including independence for conducting scientific research.

Jo Nijs

Associate Professor in Physiotherapy, Vrije Universiteit Brussel, Belgium

In Belgium, we have a long tradition of university-based physiotherapy education. In fact, years ago all university colleges lost their licence to teach physiotherapy. Nowadays, only universities are allowed to teach physiotherapy. The Belgian law stipulates that a practicing physiotherapist should have a master of science degree in rehabilitation sciences and physiotherapy to enter the profession. It appears that many other countries in and outside Europe are following this development. It will greatly add to the quality and development of our profession.

I do hope that the position of physiotherapy within Academia in Italy will improve. Physiotherapy

needs its independent place in Academia, including independence for conducting scientific research.

Paolo Pillastrini

Associate Professor, University of Bologna, Italy

[Your personal involvement in scientific and educational activities]

I am President of the Bachelor in Physiotherapy at the University of Bologna and teacher in “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.

[Your opinion on the advantages that the presence of academics physiotherapists could bring both to the formation of the students and to patient care]

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

Principal Lecturer, Programme Leader Professional Doctorate in Health and Social Care
Course Leader MRes (Clinical Research), Hub Leader Surrey and Sussex Allied Health Professions
Research Network, Centre for Health Research, School of Health Sciences, East Sussex (UK)

[Your personal involvement in scientific and educational activities]

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.

[The type of involvement of physiotherapists in the university system of your Country]

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

[Your opinion on the advantages that the presence of academics physiotherapists could bring both to the formation of the students and to patient care]

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

Assistant Professor of Physiotherapy at the Technological Educational Institute of Central Greece, Greece.

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