

PUNK IT UP!

@Charles Sturt University, Australia

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# PUNK IT UP!

# INTRODUCING PHYSIOTHERAPY STUDENTS TO CLIMATE CHANGE

### INTRODUCTION

The physiotherapy program at Charles Sturt University is 4 years long and is delivered over three campuses in rural NSW, Australia. PHS306 Exploring the Breadth of Physiotherapy Practice was a new subject in 2023.

An online module and assessment were designed to challenge 3rd year physiotherapy students with the concept of climate change and physiotherapy.

## INSTRUCTIONS FOR STUDENTS

Read about Physiopunk and the eight stories developed by physio students at the Arctic University of Norway that are found here. A follow-up volume of Healthpunk stories and more information about this experimental writing genre can be found here.

Find 5 online artifacts (podcast, article, webinar, blog, website, etc) that were created within the last 2 years and reflect the current and future challenges of climate change to the health of the global population.

Post the URL and a summary of the main premise (100 words) for each artifact. Using ideas raised in these 5 artifacts, the Physiopunk concept, and the student stories as a stimulus for your thinking, respond to the following statement:

The practice of physiotherapy in the future needs to respond ethically and sustainably to the challenges of climate change.

Illustrate your response by discussing this statement in the context of the possible future treatment interventions for one of the health issues in gender health, oncology, or age care modules studied in this subject (1000 words).



# JAYDE BLACK

Dear diary,

I am annoyed. I am upset. I am frustrated. I am studying a degree where my lecturers and the wider profession preach " do no harm". It is drilled into us from day one, year one of our bachelor of physiotherapy that our practice needs to be "ethical and sustainable". What is the true meaning behind these phrases? What are they trying to imply? Did they only mean this in a literal sense and did not expect students to be infuriated when they saw practice in the flesh?......

If our task is to "do no harm" in this world, why are we allowing our society to do exactly that through the consistent purchasing of continence pads and products when there are mounds of research and evidence in favour of exercises? Exercises that improve incontinence and reduce the need for these products? Do physiotherapists not understand the broader implications of this? The cost that incontinence products have on society? Both the monetary cost but also the cost to the health and wellbeing of citizens and the generations to come. Do physiotherapists understand that majority of continence products are disposable and impact our landfill, taking years to biodegrade. Do they understand that continence pads are made from cotton that uses pesticides during growing which can pollute our water? And thus, making the water contaminated, which is harmful to living organisms?... For many men struggling with incontinence, their first point of contact would be their general practitioner, and for some women it would be a women's health physiotherapist. Both of these can have extensive waitlists and be booked out for days or weeks depending on the location an individual resides. As a profession, we need to advocate for students to be taught more about gender health. In the future, more time needs to be spent teaching, learning, and studying pelvic floor muscle training. If we advocate for this and drive this message, in the future we won't have the significant burden caused from continence products. Our healthcare system won't be overrun by a condition, that as a physiotherapist, we can easily help manage and treat. Access to care won't be scarce.....

I am disappointed that I was once so eager to enter a profession that I believed had the same interests and beliefs as myself, only to find out that it really doesn't. I am disappointed that my excitement to enter the workforce under this profession has diminished. I am disappointed that my lecturers preach "do no harm" yet are not as enraged about what is occurring in our profession. I am disappointed that the university curriculum doesn't address this issue. Yet, I feel empowered. I feel driven. I know the impact I want to make. I know the changes that I need to advocate for. I know what needs to be done, and I know the next steps I need to take to ensure that the future generation of physiotherapists don't experience the same anger and frustration as myself. I know how as a profession we can improve and be better, and really leave our mark on the world.

Diary, I am tired. I am drained. Tomorrow is a new day, and tomorrow is when the change begins. Goodnight.

### **ALEX BYRNE**

Climate change is a global crisis. As a health professional in this day and age, I feel somewhat obliged to advocate for positive health behaviours that do not harm the world in which we live. This is a heavy burden to carry considering the devasting impacts climate change has on our wellbeing and the environment. But nevertheless, if I don't do it, who will? I studied physiotherapy back in 2020 and graduated 2023. Back then, little emphasis was placed on raising awareness of incontinence, let alone how to treat it. Which is funny considering the pelvic floor is made up of skeletal muscles which have just as much potential to get stronger, or weaker, just like any other skeletal muscle. But hey, I know how to mobilise the tip of someone's finger and that's pretty important, right? (Don't answer that!). Looking back on it now, it's hard to believe the little time we spent learning about incontinence and how to treat it, considering the amount of people it affects today. Did you know that if incontinence were a country, it would be the 3rd largest by population? Graduating as a physiotherapist I felt so ill equipped in dealing with those suffering from incontinence. Although I was lucky enough to have some background knowledge on the issue, thanks to my dad.

Flashback to June 2022. My dad had just undergone a prostatectomy shortly after his diagnosis of prostate cancer. In the months following his procedure, he experienced ongoing incontinence, which, had significant impacts on his psychological and physical wellbeing. He couldn't afford private health insurance, so was forced to have his procedure done in the public sector. The day following his operation, the physiotherapist on the ward came to my dad's room to provide him with some information regarding his rehabilitation.

A pamphlet. They gave him a pamphlet, and then discharged him...

I propose that universities across Australia alter their physiotherapy course structure to ensure that incontinence across all life stages, including men and prostate cancer, is thoroughly addressed. We have all the evidence available to us, we know that pelvic floor muscle training has major impacts on reducing incontinence and we have all the necessary resources to make it happen. Pelvic floor muscle training needs to be an essential component of musculoskeletal physiotherapy subjects at universities and students need to learn how to teach these exercises in practice. In addition to this, knowing the implications of their treatments on climate change and how they can use their profession to their advantage in reducing their carbon footprint is pivotal.

What about those men who go through the public healthcare system when undergoing a prostatectomy? Just under half of all Australians do not have private health insurance. Some men do not have the financial means to go to a physiotherapist in a private practice, yet all we are doing to combat this issue is provide them with an information pamphlet. The NSW Government needs to step in and provide incentives for physiotherapists in the public hospital system to further their education in pelvic health and urinary incontinence, to ensure that all individuals are equipped to effectively manage their incontinence and reduce their reliance on sanitary products.

I wish I could tell my younger self all the things I have just written about here instead of waiting so long to figure all of this out. It is no longer just about our patients, because if we don't protect the world in which we live, our patients won't stand a chance regardless. Physiotherapists have the potential to change the paradigm that underpins our profession. The question is, are you going to be the one who makes a difference?

### **BEN FROST**

The slow demise of the Outstation colonising populations on both Mars and the rings of Saturn was an inconceivable prospect 300 years ago. The attempted takeover of the Martian surfaces by 250 thousand people was meant to safeguard the human population against extinction due to human-induced atmospheric change...

The Outstation life support modules were adapted many years ago to support life at sea. Utilising ocean thermal energy to power them and an artificial gill system to draw oxygen from the water we have lived in them now for decades. Overpopulation combined with claustrophobia produced a toxic uprising of an extremist minority known as the Peoples Deliverance Force (PDF). The PDF overthrew the International Government Representative Council, implemented ruthless laws and ruled with an iron fist. Physiotherapists were forced into conducting assessments of the old, the weak and the disabled. If an individual's capacity to contribute to society was deemed unsatisfactory, they were jettisoned via the emergency escape hatches of the life support module where their body would implode due to the ocean pressure. Refusal to complete assessments of vulnerable community members resulted in the jettisoning of the disobedient therapist. Population pressures declined and with it the knowledge and wisdom from elders, banished to the oceans floor.

Torn by what was occurring and having an obligation to uphold the code of ethics to practice, an underground movement from the members of the International Physiotherapy Association (IPA) was initiated. The top-secret development of an anti-aged care facility began. Initially, it was slow and arduous. Major setbacks occurred when a copy of the blueprint for the gravity manipulator was discovered and resulted in the jettisoning of John, Pauline, Georgie, and Ringo. As re-education continued and the collective physio knowledge bank grew, the project broke trail and after 3 decades came to fruition.

The external dome of the anti-aged care facility consists of two spheres one sitting inside the other. When the spheres spin, they produce either a positive or negative gravitational force depending on the direction of movement. Within the spheres is the treatment chamber that can accommodate 30 participants and up to ten physiotherapists, doctors, nurses, or other allied health professionals. The floor of the chamber can change density and so in the case that someone falls it softens and absorbs their impact and then returns them to an upright position. Initially, community members that were at risk of failing the PDF's assessment were transported in the dead of night to the anti-aged care facility where they would undertake an intensive rehabilitation program. The effects of gravity were manipulated to increase or decrease workload. The zero-injury rate due to falls because of the density changeability of the floor allowed the intensity and difficulty of exercises to exceed that of anything attempted previously with conventional facilities. The restoration of balance, strength and physical function exceeded initial expectations and within four months few were failing the assessments.

As age, wisdom and knowledge began to evolve once again within our society, it brought with it an uprising for change and resulted in the removal of the PDF. Inspired by what the IPA achieved a new International Government Representative Council was established and chaired by me, the elected member of the IPA. Plans for when we once again reoccupy

earth's surface began being discussed. Amongst many new policies was the revolutionary anti-aged care plan. People at risk of losing independence and facing the prospect of living in an aged care facility are recruited into a short-term rehabilitation program within the anti-aged care facility so that they can remain independently living amongst society. The vast savings on the healthcare system will then be funnelled into the IPA's technological research centre where specialist physiotherapists will continue the development of new health technologies.

Human induced climate change has torn at social cohesion due to both the physiological and psychological stresses it has placed on our very existence. We humans have changed our planet forever due to a misunderstanding of the role of its resources and the innate interconnection we hold with it. Our reliance on the earth for food, clean water and shelter requires us to recognise the importance of the environment and its reciprocal impact on our health. Tomorrow I will be amongst the first people in 200 years to walk upon the earth's surface once again, for the planetary rectification process is complete. However, life will never be the same as it once was for those who lived upon the earth's surface before me.



### MILO ELDER

When I think about the practice of physiotherapy responding ethically and sustainably to the challenges of climate change I am inspired by history, current events, and the wisdom of First Nations peoples.

#### Asking, Pleading, Begging:

When Gundagai was colonised, the settlers planned to build on the banks of the river. The Wiradjuri Aboriginals warned them not to. They said the water would come. Their warnings fell on deaf ears and the town was fatefully built on those river flats. Over time the town endured moderate floods, yet no flood plan was put in place by the town's leaders. Eventually the big flood came, the deadliest recorded flood in Australia's history. Between 80 and 100 people perished, but many were saved by local Wiradjuri men, Yarri and Jacky... Listening, Adapting, Changing:

We claim to be listening, but what if we really listened and then radically changed. Touch and movement therapies have its roots in most traditional cultures and are the core of physiotherapy practice. Traditional therapies are taught and passed down through generations of communities, not necessarily just taught through institutions such as universities which can be culturally unsafe and inaccessible. It is this reason that so many traditional therapies are not viewed as valid, because there is a lack of peer reviewed articles on these practices. If the climate crisis comes, perhaps the welcome consequence would be the death of colonised institutions.

But what if we could decolonise our practices and institutions now? If physiotherapists could directly impart knowledge and skills to be passed on and integrated into social norms, we could potentially prevent many poor health outcomes as well as reducing harm to the environment. Reducing harm to the environment will further decrease poor health outcomes for the inhabitants of Earth and the current cycle of destruction and displacement could potentially be reversed, however slowly. For example, incontinence is an extremely common health issue affecting all genders. Incontinence is also preventable, and can often be treated conservatively through education, hands on treatment and exercise. If physiotherapists were able to impart prevention and treatment tools to communities across the globe, not just First Nations communities, an incomprehensible amount of landfill waste could be reduced due to a decreased need for single use incontinence products. In Australia alone, approximately 450 thousand tonnes of incontinence products are dumped into landfill per year. The current global amount of this pollution is inconceivable, especially when you realise these products take over 500 years to decompose.

Across the globe, First Nations communities generally have a philosophy of interconnectedness. The health of the individual is related to the health of the community and the health of the land on which they reside. This philosophy is truly being realised in the most catastrophic sense due to our world leaders' lack of care and foresight for the environment. Ethically, our physiotherapy practices need to not just be patient-centred in the sense of the patient feeling safe during treatment, but centred on a core belief that our profession should not add environmental harm to the world, as this harms the health of the Earth's inhabitants and causes displacement and destruction of cultures and ecosystems.

### PATRICK OLVER

A loud thump on my door springs life into my eyes, from a muffled voice behind the door "Ms McLaren, it's time for today's session, we will see you on the field in 15 minutes." I press my weathered hands, rub the sleep from my eyes and sit up in bed and look to the window, the sun is wrapping its fingers around the closed curtains trying to fill my room. I climb out of bed and walk to the window, pushing the curtains aside the sun steamrolls in. Even through the tempered glass these 45-degree mornings are quick to heat the room. My gnarled fingers twist the handle to my bedroom door to reveal the hordes of shuffling participants moving through the old stadium toward the field like gladiators to the arena. Walkers and sticks only remain with a few after the past 8 weeks. I join the stampede looking around this building, a familiar setting, my late husband used to bring me here to watch the rugby, I struggled to understand the rules after all these years, but I loved the atmosphere. This once great arena has now been repurposed as a training camp for the elderly. The world is a crowded place now, extreme weather and increase of disease and illness plague our society. Our government could not continue to foot the growing medical bill for us, so they established these bootcamps to improve our health and our individual fight against illness. Those who fought against it were met equally with those who agreed with the idea. We had knowingly done enough damage to this planet, and instead of continuing to blame our past for the current situation, like the younger generation, we wanted to look to the future to have a positive impact on society.

"Ladies & Gentleman, welcome to your final week of 'Aging Athletes'." Boomed Henry's voice over the PA system. Henry's enthusiasm and eagerness to help was first mistaken as a cocky young new Physiotherapist, who thought he knew everything, but he has helped us remember that we are strong, robust, and have plenty of life left to be lived, and for that I am grateful. "You have all done really well at sticking to your exercise programs, this week we will continue with our community clean-up program, we will rotate a few of the groups around, with Three - E you will be going to gardening group & Six - A you will be joining the beach clean-up crew."

These camps were set up all over the country, the criteria were simple. Before you can enter a retirement home, you have to complete this course, if you were found to still be at risk of falls or illness and did not benefit from the program, then you were to enter an aged care facility, if you improved or maintained your ability you returned home. This policy was met with great divide, on one side you had those who did not want to have exercise and felt it was there right to access a facility from all their previously paid taxes and live quietly for the rest of their days, and on the other you had those who wanted to maintain their independence and avoid the multitude of diseases in today's world. I was on the latter, in a previous life I was a dancer, one of the best in the world, dancing on stages all over the globe. When I retired from the bright lights, the hairs on my head began to turn grey and the world began to implode, our ignorance had caught up with us and, like a biscuit in your brew, it began to crumble and disappear. I want to leave this earth on my terms and be able to leave a positive mark rather than one of destruction.

As I walk to the far end of the stadium to find my section the sun begins to fade, clouds begin to plume on the other side of the glass roof, heavy rainfall begins to drown out any other noise. In my section there is a series of exercises we must complete on the whiteboard, scattered around is the equipment made from recycled plastics and car parts. Before joining this program, I could barely lift anything, I wouldn't challenge myself fearful that I would hurt myself, now I'm able to do a 'farmers carry' with two mufflers for 50m. The physiotherapists here have reimagined my old dance training to suit my current ability and I am glad to not be entering an aged care facility or "god's waiting room." I think I will look to return to the dance studio to teach once again, try and find positivity in this gloomy world.



# **COURSE EVALUATION**

An online survey consisting of open and closed questions was distributed to students after the completion of the Punk it up! assessment item.

There were 34/100 (34%) responses, 97% of students agreed that climate change and environmental sustainability are important to physiotherapy practice, 50% stated that the physiotherapy profession should be doing more to address climate change and 45 % suggested it should be embedded within all physiotherapy subjects within the program. Some assessment responses challenged the "traditional" core elements of physiotherapy suggesting entry-level education should include pelvic floor physiotherapy, including incontinence management to increase the number of physiotherapists who could provide physiotherapy management to people reduce the waste from incontinence pads.

# REFLECTIONS ON HOW IT WENT AND THE WAY FORWARD

For some students the creativity aspect was challenging, for others it was a welcome break form "traditional" core hands-on evidence-based practice subjects. The assessments were a joy to mark. There was a passion with some of the responses to instigate change not only for the environment and climate but also to challenge the status quo of the profession and how it is taught at the university.

Challenging the status quo of entry-level curriculum. Punk it up! has led to research projects exploring entry-level physiotherapy programs and climate change in Australia that we are hoping to extend into other countries.

