PHYSIOTHERAPY

An Introduction to Physiotherapy

It was an absolute pleasure to be a part of Coffee Connections on the 18th of February. As some parents and teachers were not able to join, I have summarised our chat for those who are interested.

For those who haven't had the chance to meet me, I am Ashley the Physio. Just a little bit about me: I completed my BSc (Physiotherapy) at UCT. In my final year I was awarded the Jannes Karl Wilhelm Binnewald Trophy for the best final year student in Clinical Physiotherapy.

After graduating, I completed my Community Service year at Red Cross War Memorial Children's Hospital. It was here that my passion for paediatrics was truly solidified. Red Cross also taught me to go the extra mile for my patients and the value of a family-centred and evidence-based approach. I was fortunate enough to have experienced a wide variety of conditions that taught me more than I ever could have imagined.

I am currently completing my Master's in Physiotherapy. My research title is "The effects of physical activity on gross motor development in children ages 4-6 years old in Cape Town".

Some of you might have seen me around the school. I am quite easy to spot thanks to my scrubs and the fact that I turn any and everything into a piece of physic equipment. No line on the ground or step will ever be the safe again!

For those of you wondering where I fit into the Bishops Pre-Prep family, my job is to see little ones who need some extra support developing their gross motor skills or some strengthening to meet their potential. Some of the common reasons kiddies are referred to me is to assist in improving coordination, balance, strength, hand-eye coordination and ball skills. Another reason for referral is to assist in desk posture by improving core and shoulder stability strength as well as the endurance of these muscles. These are typically the kids who struggle sit up right at their desk. In fact, I am sure there are a few adults who would benefit from some Paeds Physiotherapy!

Clues that your child might benefit from seeing a physio include:

- A clumsy running pattern
- Tripping over their own feet when walking on even surfaces
- Preferring to lie down on the mat when watching TV or listening to a story. The child just seems to not be able to keep themselves upright. They often lie on their tummies or backs and just generally find sitting upright quite difficult
- Getting tired very quickly with exercise. It is understandable for a child who has gone from cricket to Playball to swimming to be tired. This is normal, any adult would be exhausted too. The concern arises when the child gets quickly tired kicking a ball back and forth, really struggles to get through a swimming lesson or really struggles to concentrate after playing soccer at break.



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- Avoiding physical activity. Physical activity in children is slightly different to physical activity
 in adults. It does not mean running around the Rondebosch Common three times. It is rather
 avoiding climbing jungle gyms or tress. It can also be rather choosing to play with the "fine
 motor/sensory" toys rather than playing a game of cricket with their friends. It is completely
 normal for children to want to engage in a variety of activities. The concern lies when they
 completely avoid these physical tasks.
- Unable to sit upright at the desk or table. The typical posture is head in hands, pressing down heavily on page, slumped over their dinner or homework. There just seems to be no time of day where they are able to keep their trunks upright for a longer period of time. Keep an eye on their posture at breakfast or dinner, when doing homework or drawing at the table

What are gross motor skills (GMS)?

GMS are also known as Fundamental Motor Skills and they are exactly that. These are the motor skills that form the foundations of all movement. We need them to perform all our day to day tasks. For example, try putting on a pair of pants if you can't balance, or coordinate scrunching the leg up and stepping into the pants? This is a very complicated task that we have simplified after thousands of repetitions. But your little one is still busy gaining experience in these tasks. Gross motor skills consist of ball skills, jumping, leaping, running and balance. Strength and coordination are included in these skills.

Benefit of GMS

There is strong evidence to support GMS having a critically important role to play in many aspects of development.

They have been associated with children's physical, psychological and cognitive development.

- Physical Development: Research has shown that there is a interdependent relationship between physical activity and GMS. One needs adequate GMS to be physically active but in order to develop GMS, one needs to be physically activity. From here, it is easy to understand the relationship between GMS and body mass index, cardiovascular endurance and other health markers. GMS have an impact on a child's physical health. One can only begin to imagine how Lockdown affected our children's gross motor development...
- Cognitive Development: Cognitive functions such as language, mathematics and literacy share similar parts of the brain. They also share many processes such as sequencing, monitoring and planning. Research has seen a link between GMS and cognitive development. From here, one can see how GMS might play a role in school readiness.
- Psychological and Social Development: GMS play a role in developing children's self-esteem and self-efficacy. They may also assist in the development of social skills. Children learn to take turns and to communicate with each other when engaging in gross motor tasks.



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Occupational Therapy versus Physiotherapy

Although there are areas of overlap, OT and physio have two difference roles. We might use the same activity but we are looking at different components of the activity. For example, drawing a picture. The OT might be focusing on the pencil grasp, what is the non-dominant hand doing, how is the child using the page (are they using the whole page or only drawing on a section of the page), how are the writing their name, what does the letter formation look like? While the physio would take note of the above examples, the focus would be on what is the child doing with his/her legs, are they planted firmly on the floor or are they wrapped around the legs of the chair? What is the position of the pelvis, what does their trunk look like, are they able to keep themselves upright or do they need to use their hand to support their head. Both the OT and the physio would take note of all of the examples mentioned, but our focus and area for intervention might differ.

OT tends to assist in the development of fine motor skills, planning, organisation, cognitive processing and emotional regulation. They also have a massive role to play in assist with sensory concerns and providing the child with tools to regulate themselves. While physios do have a basic understanding of sensory seeking and avoiding behaviours, we do not have the training to treat them. We can however use various tools to help the child regulate for our session, to achieve what we need to do.

Please note, this is by no means the only areas in which a physio and OT can assist. The above is solely to give you an idea of the difference between the two professionals.

Lastly, if it is recommended that your child see a physiotherapists, please don't feel as if you have done something wrong or that there is something wrong with your child. If your child does receive a referral, it means a teacher, therapist or someone in their life has noticed that they have potential that they might need some extra support to achieve. Us as therapists have tools that help children unlock their own potential. Our job is to help them reach this potential and having fun while we do it.