EDITORIAL

Modern orthopaedics and the forgotten child

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The French physician, Nicholas Andre, coined the term 'orthopaedics' in 1741, having derived it from the Greek *orthos* meaning straight, and *paedeia* meaning the rearing of children. Therefore, 'orthopaedics' can be loosely translated as the art of making children straight.

Much has changed in the subsequent 300 odd years, and the field of orthopaedic surgery has evolved and expanded beyond anything that Andre and his peers could have foreseen, displacing the management of children's deformities further and further into the background.

There are many reasons for this diminishing prominence of paediatric orthopaedic surgery. Certain common causes of deformity in children, such as rickets and polio, have become largely, if not completely, obsolete. Bone and joint tuberculosis, historically a frequent cause of deformity in children and adults, seldom leads to long-term complications these days as it is diagnosed early and effective antitubercular treatment exists.[1] At the same time, the ever-growing ageing population results in many more patients developing disabling degenerative disease requiring surgery. Older people have higher functional demands and want to be pain-free and mobile. Coupled with the success of arthroplasty and other reconstructive surgery, the proliferation of the device industry has meant more and more of these operations are sought after and performed.

Another important contributing factor to the decline of paediatric orthopaedics is the poor professional remuneration. The monetary units for common paediatric procedures are disproportionately low, to the point of being a disincentive to practising paediatric orthopaedics. For instance, using standard (albeit creative) coding bundles, a carpal tunnel release will earn you 417 units, whereas an open reduction for a congenital hip dislocation with application of a spica cast will earn you 458 units. In a recent meeting by members of the South African Paediatric Orthopaedic Society (SAPOS) about this very issue, one member stated that closed reduction and K-wiring of a distal radius fracture is the most lucrative procedure they perform. Imagine that. Add to that the stress of operating on children and dealing with anxious parents, and it is no wonder that there are so few of us around.

According to StatsSA, 28% of the South African population is younger than 15 years of age, and 34% is younger than 18. Yet, of the 897 members of the SAOA, only 41 are members of SAPOS, and of those 41, only 18 are in full-time paediatric practice. With the most recent estimate of our population being 59 million, this translates to a surgeon to patient ratio of approximately 1/500 000 for paediatric orthopaedics. Furthermore, the few paediatric orthopaedic surgeons in South Africa are based in and around the major centres, whereas there are none in Mpumalanga, North West, Limpopo or the Northern Cape.

There is a great need for paediatric orthopaedic fellowships in South Africa. Without local fellowships, aspiring paediatric surgeons are obliged to do international fellowships, increasing the risk of their being recruited by overseas practices and never returning home. The main reason for the absence of paediatric fellowships is lack of funding. Paediatric orthopaedic surgery is not implant intensive, resulting in less interest and buy-in from the implant industry, who sponsors most of the existing fellowship to a degree. I am currently in negotiations to obtain some funding for a fellowship at UCT, but even if I succeed, it will not be enough to constitute a full salary.

Due to this general lack of interest and specialised training, the largest group of children with deformity remains poorly managed, neglected and misunderstood. I am, of course, referring to those children with cerebral palsy (CP).

The incidence of CP in South Africa is not exactly known, but the reported incidence ranges from 2/1 000 to as high as 10/1 000 live births.[2] The vast majority of children with CP will develop musculoskeletal deformities, deformities that are amenable to surgical correction. That amounts to a huge burden of disease.

As a dedicated CP surgeon, I have often heard the cynical joke: 'What do you get if you operate on a CP? An operated CP.' What a staggering misconception.

The literature abounds with high level evidence to support orthopaedic surgery for patients with CP. Once you have experienced the joy of a child who can walk for the first time because they had well-timed tendon surgery, or the teenage boy that can exchange his Kaye-walker for a single crutch, or the mother who can carry her child on her back after an adductor release, you will not need much more convincing.

I am fortunate to work in a well-organised CP clinic at Red Cross Hospital, where there is a lot of cross-pollination due to the multidisciplinary nature of the clinic where therapists, paediatricians, orthotists and surgeons all contribute. After five years of combined clinics, the paediatricians have become adept at hip surveillance, and it is rare these days for a patient to be referred from within our system with an established hip dislocation. A triumph indeed. The next step will be a national hip surveillance programme, similar to what exists in many developed countries.[3]

To grow this field nationally, a paediatric fellowship in a high-volume practice is essential. This of course requires funding, a scare commodity at present. Out-of-the-box thinking is required to grow this very worthwhile and fundamental area of our profession.

References

1. Vajapey S, Horn A. Tuberculosis of the extra-axial skeleton in paediatric patients. SA Orthop J. 2021;20(1):21-26. https://doi.org/10.17159/2309-8309/2021/v20n1a2.
2. Katangwe TJ, Van Toorn R, Solomons RS, et al. A South African cerebral palsy registry is needed. S Afr Med J. 2020;110(5):353-54. https://doi.org/10.7196/samj.2020.v110i5.14504.
3. Shore B, Spence D, Graham H. The role for hip surveillance in children with cerebral palsy. Curr Rev Musculoskelet Med. 2012;5(2):126-34. https://doi.org/10.1007/s12178-012-9120-4.

DOI 10.17159/2309-8309/2022/v21n1a0