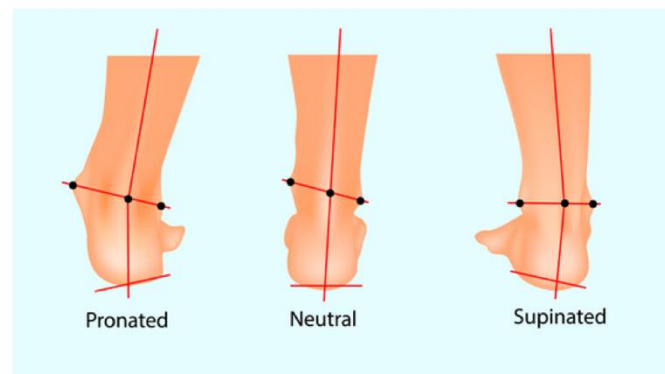




Evolution of the UK Foot Health Profession

A clinician's perceptions

David Holland



With 47 years under his belt David Holland provides a reflection of how far podiatry has travelled from its Cinderella days having emerged from Chiropody. He introduces his own perspective on the profession, its growth from diploma to degree, and challenges some precepts initially applied to the subject of biomechanics. It is hoped to develop the subject of biomechanics further in 2019 as this is a fundamental part of practising podiatry. A second article is attached covering more on **Black Box Thinking** which underpins attitudes toward reflection in our professional practice. I was able to reflect on how Ralph Graham prevented the collapse of podiatric surgery in 2012.

By 1974 it all looked very promising

As chiropodists, and not podiatrists, our three-year full-time training was essentially practical. If we had no research training at least we had a very good grounding in the basic medical sciences. We were schooled to deliver safe, palliative footcare, which I think we did rather well. Many of us realised we were over-trained for the work we did, but in retrospect that was no bad thing. It gave us a hunger – an enthusiasm to learn more, and by doing so, move the profession forward. We pushed for nail and skin surgery initially, then bone surgery.

In 1970, at the end of my 2nd year, I was offered a basic-grade chiropody position with Lincoln and Lindsay NHS. They paid me a salary through my 3rd year at college, and upon qualification I was contracted to work for them on a Senior 2 salary for two years. This arrangement was by

no means unusual at that time. My parents, who supported me through college, there being no student grant available for Chiropody where we lived, were delighted.

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Anaesthetics

Local anaesthetic (LA) training for chiropodists in 1974 was a post-qualification certificate and split into two parts: Part A and Part B. Part A was theory, designed to bring those from the first round of grand parenting (in 1966) up to speed. Part B was mostly practical. Candidates had to pass Part A examinations before being allowed onto Part B. We were allowed straight onto Part B as we had

undertaken 3 instead of 2 years training and because of our additional medical knowledge

Our local anaesthetic (more correctly, analgesia) course was run by two anaesthetists and was thorough. We were taught and examined on both the pharmacology and mode of action of different local anaesthetic agents. On the practical side, as there were no specific health and safety requirements let alone ethical issues not to inject each other, our ability to produce correct analgesia up to the level of the ankle was an important goal.

Fear of losing key skills

It has been suggested that there are more career pathways open to today's podiatry students than the chiropodists of the past, and to some extent I agree with this. But a diminution of our basic skills also seems very evident, and therein, for me, lies the problem with UK podiatry today. In retrospect, 3 years, with plenty of clinical experience, was about right for our training in the old days. We did another 1 half-day a week for 6 weeks for local anaesthetics, a weekend for skin surgery, 3 full days for radiology, and another two years part-time for an undergrad Honours degree update. Podiatric biomechanics was a matter of attending a couple of weekend courses, then learning on the job. That may, depending on the current training establishment, still be the case.

Nowadays students are expected to become podiatrists in 3 years (4 in Scotland) by undertaking a degree with all the additional learning that entails. I cannot see how that is possible without something being omitted. I believe, having looked into this more carefully, that what is omitted is the quantity and quality of clinical learning which we did. Where does that leave the new graduate or the tutors, come to that?

When we were at college it was rumoured that the USA chiropodists did surgery, but had forgotten the basic skills. This may be where we are headed.

The NHS has restricted palliative footcare to specific client groups, determining in most cases, that if the over 65s are otherwise healthy, they should pay for their footcare. If the newly qualified podiatrist is not expert in this (*I cannot see how they can be*) then where does the patient in need of palliative foot care to turn? Foot Health Professionals?

In many cases, yes. One Foot Health Practitioner (FHP) course is already validated by Queen Margaret University in Edinburgh. They also issue credits for conversion to a Podiatry degree. This, incidentally, may become a popular pathway onto podiatry in the future, since the student can "earn as they learn".

The generalist podiatrist today is currently able, with some additional training, to undertake ultrasound, perform Swift therapy for verrucae, carry out gait analysis

and fit orthoses, prescribe exercises, and medication, the list goes on. However, each treatment modality undertaken by podiatrists is also offered by other professions. All we have left being unique to podiatry is nail surgery. And manual dexterity, without the key skill of debridement would be impossible.

In the past, and despite some shaky "science", podiatrists thought to claim podiatric biomechanics as their own. Even were this true it certainly is no longer, and orthotists, let it be said, were never that happy about us fitting insoles.

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Emergence of 'biomechanics'

Rootian biomechanics is still the basis for our current podiatric biomechanics paradigms. Some pretty outrageous claims were made in the names of Merton Root and co-workers John Weed and Bill Orien. One claim was an ability to predict symptomology based on measurements alone. Those measurements formed the so-called "*criteria for normalcy*". That in itself is no bad thing, but the science behind the Rootian criteria of normalcy was flawed. Most measurement techniques for obtaining values were neither reliable nor repeatable, and the initial research upon which the whole shebang was based was carried out with small population samples. Once the UK started to form a degree-based post-diploma approach many queried the repeatability, let alone reliability claims, Kidd 1991, Ball and Johnson 1996. Empiricism was criticised but inevitably clashed with the commercial side of podiatry.

The subtalar joint neutral paradigm

Sadly, UK Podiatry seems to have moved from inquiring why, or if, something works the way it does, towards inventing reasons why it can't possibly work that way. The classic example of this is the premise that the subtalar joint does not function around neutral. The subtalar joint has therefore gained the unlikely distinction, according to some podiatrists, of being the only working joint in the human body which does not function around its neutral position. Of course, expert, and largely scientifically unproven theories proliferate – "*the axis is a helix*", "*look to the axis inclination angle*", "*our feet are meant to work unshod*", and so forth.

Ball and Johnson (1996) applied a known torque to the rear foot in 100 healthy subjects, ages ranged between 20-69, and showed how consistent inversion and version could be obtained. They considered a mean value for a combined range of movement of 49 degrees. The scientific approach to quantifying the forces used to obtain range of motion (ROM) at the rear foot now started to emerge.

Papers such as this presented podiatry with a dichotomy. Ball and Johnson wildly underestimated the true inversion+eversion ROM since they utilised an inefficient bisection-of-the-foot axis from which to obtain motion. Forty-nine degrees of combined inversion and eversion is clearly not needed by a healthy individual for support and ambulation on a pavement. And yet we have accepted, and continue to accept as meaningful, research findings on work carried out on the one supporting surface which is going to hugely influence, by restricting joint ROM, how the foot functions – the hard, horizontal, gait lab walkway.

As theories change so must we

We hear the phrase “*we can only work with what we have*” More accurately that should read “we will only work with what we have, and that only provided it fits with all our current theories”. Ball and Johnson’s paper has hardly been cited by any podiatrist in over 20 years.

Podiatric biomechanics forms one of the keystone principles behind our treatment modalities. It is not, probably because it was always considered an esoteric art posing as science, hence the proliferation of “experts” and “specialists” in this field. But if our profession can find the will to change, podiatric biomechanics can be a science (as opposed to a “science”) and therefore taught as such, and at undergraduate level too. Biomechanics should be taught as a science, which includes kinetics, kinematics, and the biomechanics of organic tissue.

We still have plenty to do in terms of finding out how and why foot orthotics work. The 1996 Ball and Johnson paper, in my opinion, is a good place to start. Also, there is much to be said for moving outside of podiatry teaching establishments to broaden our research knowledge. Biomedical engineering in particular has a great deal to offer our profession in the way of robust methodology, as anyone who has spent any time in that environment will readily attest.

Ideas for the future?

I see a time coming in the not too distant future where interchangeable skills will allow the NHS to appoint one super therapist, rather than a pod, a physio, and a wound care specialist, the basic work being carried out by lower-trained clinicians, with perhaps a two-year degree or equivalent. That may be a good thing for the NHS. It may even work in our favour if generalist podiatrists are skilled-up sufficiently, and prepared for a move to total private practice.

A united, strong, and vibrant podiatry profession, where trained and insured foot health professionals undertake simple palliative care, but refer to a podiatrist for anything more. I would like to see all podiatrists able and willing to accept referrals from FHPs, trained to carry out advanced diagnostics and treatment, and able and willing

to refer to sub-specialities within the NHS, and to podiatric surgeons as needed. The podiatrist need not worry too much about palliative care - they can refer those patients back to the FHP as required. Inherent in this model, in fact I believe mandatory for a successful framework upon which to build a strong and vibrant profession. This simplifies the career pathway for those who wish to progress from FHP to generalist podiatrist, or from generalist podiatrist specialist podiatrist, or to podiatric surgeon.

This would require each of us to up his or her game. It would require a willingness and enthusiasm from all to grow the profession, and to a large extent that will mean building and strengthening our research-base with good-quality, meaningful research which is relevant to Podiatry.

References

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The author

David Holland lives in Mid-Wales with his wife Alison and rough-coated lurcher, Taz and is actively involved with several conservation bodies on the River Wye. He has a passion for fly-fishing for wild trout, grayling and chub, and he and Alison kayak regularly in the Brecon Beacons year-round, and in Cardigan Bay in the summer months.

David is a Fellow of the British Chiropody and Podiatry Association, and an Academic Fellow of the Institute of Chiropodists and Podiatrists. He has worked for many years in private practice and the NHS as well as running his own successful Civil Law Medicolegal (Podiatry) Company. He was awarded a Research MSc in Biomedical Engineering from St Chad’s College, Durham University in 2002, and was admitted to Membership of the Faculty of Podiatric Medicine of The Royal College of Physicians and Surgeons of Glasgow in 2017. He is Chair of the Ethics Committee of the Institute of Chiropodists and Podiatrists.