

Is 90 degrees a right angle?

For the ideal seating set up, all joints should be at 90 degrees, just like in the text books, or should they? The answer is: “Usually No”.

Look around you: how many people do you see sitting naturally and comfortable at 90-90-90 positions in symmetric positions? Unless you are a character from a Lego movie, your seat to back support angle at 90o will be very uncomfortable and difficult to maintain

Most of us need space at least for our shoulder blades. At the pelvis, a neutral pelvis results in maximal gravitational pull through the ischial tuberosities. Work with the iShear device has shown that a ‘neutral pelvis’ exerts more shear on the seat surface than when at a 3o recline.

For those wishing to control athetoid (involuntary, convoluted, writhing) movements, an asymmetrical the sitting position, induced by turning the trunk, and hooking one arm around the back support, gives more control of the other arm.

Foot supports requiring an angle of 90o or more at the knee, will often result in inducing a pelvic posterior tilt and spinal kyphosis (curvature), due to shortened hamstrings common in wheelchair users – so think where you place the foot support.

You change the relative position of your head to your pelvis to your feet, depending on your activity (compare eating, with using a computer, with watching TV, with sitting on the toilet) – hence, a good seating set up allows the occupant to get into the best functional position for their activity, and it will seldom be 90-90-90.

‘Let’s Get it Clear’ by Dr Barend ter Haar

One in a series of occasional resumés of aspects in the world of posture and mobility where there are common misconceptions, and myths to be addressed, to help promote better practice. Further items can be found at www.beshealthcare.net. If you are interested in receiving further information on the topic, please contact barend@beshealthcare.net.

Dr ter Haar has been involved in seating and mobility for over 30 years, including lecturing internationally, and developing international seating standards.