

### OUTCOME ASSESSMENT IN SURGERY FOR DEGENERATIVE DISORDER OF THE LUMBOSACRAL SPINE

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Degenerative lumbosacral disorders involve the gradual loss of normal structure and function of the spine over time. The growth of the ageing population has led to an increase in the number of spinal surgery for degenerative lumbosacral disorder recommended when conservative treatment fails. Nevertheless the clinical benefit of this surgery remains controversial when a significant number of patients fail to achieve the expected beneficial outcome.

The overall aim of any surgical intervention in degenerative lumbosacral disorders should be to eliminate the primary pathology of the disease (e.g. loss of sagittal balance) to achieve an outcome that restores or improves patients' health-related quality of life (HRQL). In order to assess health-related quality of life, a plethora of outcome measures are employed in the speciality of spinal surgery. The ability to measure outcome of surgery and to predict which patients will have a good outcome from surgery is important for patients and the healthcare systems as a whole.

The concept of maintaining or restoring spinal sagittal balance is essential in managing degenerative lumbosacral spine disorders. The focus of spinal fusion and deformity correction techniques are obtaining fusion of the diseased spinal column in the optimal balanced alignment in order to improve the long-term outcome of surgery. The spinal sagittal balance is characterized by both pelvic and spinal parameters. No single measurement can accommodate the entire spectrum of spinal curvatures. All methods available for assessing the spine in the sagittal plane have their strengths and caveats.

### URICULUM VITAE

Dr. Sabarul A. Mokhtar is currently the Deputy Director of Hospital Canselor Tuanku Muhriz(HCTM) and Deputy Dean(Development), Faculty of Medicine, Universiti Kebangsaan Malaysia(UKM). He obtained his Medical Degree from UKM in 1996. After completed his internship and rural hospital placement in Sabah, he was recruited back to Universiti Kebangsaan Malaysia and completed his training as an orthopaedic surgeon in 2003. He continued with subspecialty training in the field of Spine Surgery at Tohoku University, Sendai, Japan in 2005. In 2008, he was offered a position as a PhD Clinical Fellow for Spine Surgery at the Australian School of Advanced Medicine (ASAM), Macquarie University, Sydney. He was the pioneer orthopaedic surgeon working and doing research at the Macquarie University Hospital and completed his PhD in 2012 entitled "Development of a Model for Assessment and Predicting Outcome in Surgery for Degenerative Disorder of the Lumbosacral Spine" where his research and practices mainly focused on the ageing spine.

He is the President for the Malaysian Spine Society since 2016 after serving as the Secretary of the society since 2012. He is actively involved in the undergraduate and postgraduate education at both national and international level by being the member of the Malaysian Conjoint Board of Orthopaedics, National Orthopaedic Curriculum Committee and ASEAN Orthopaedic Association (AOA) Education Committee. He has presented and authored in a number of scientific papers and abstracts that are testimony to his clinical and research interests in spinal disorders and osteoporosis. He is involved in multi-centre clinical trials (e.g. Multicentre Study For Evaluation of The Efficacy and Safety of Buprenorphine Transdermal Patch(Pain Study) and Asia and Latin America Osteoporotic Fracture Observational Study-ALAFOS Study). He has received a number of awards for his services, academic achievements and innovations.