Evoking early awareness for brain developmental research and integrating related issues into the paediatric curriculum for a sound cognitive build-up and continuity

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Abstract

Reliable publications have stated that brain - nervous system diseases / handicaps constitute at least 30% of all of the health problems in the European countries (at large) as well as in North America. Extensive surveys on randomly chosen, representative curricula on behavioural sciences, bio-medical, medical, and other health sciences under-graduate and graduate programs in Europe and other countries have shown that developmental concepts are neglected, under-represented, or introduced with delays despite the fact that both behavioural and bio-medical research have contributed prominently to our understanding of brain and nervous system recently. This presentation aims to focus on the importance of early exposure and conceptualization, beginning from the very initial phase of medical and other health sciences education, exclusively, of issues / understandings related to “newborn / infant / child / adolescent / young adult and mature adult are very different from each other and that these differences are extremely significant” and “all pre-natal, delivery process and post-natal effects and experiences impact the health and the activational capacity of the individual’s brain – nervous system (from psycho-motor development, capability of learning and being trained to mental productivity, creativity and social leadership skills) in all the phases of life to follow to a great extent”. Neuroscience and behavioural research findings, especially relating very many of the later phase of life neurodegenerative diseases and adult behavioural patterns could very well be meshed into the long course of medical education, specialty training or graduate program and life long professional development of a family doctor, paediatrician, paediatric surgeon, paediatric neuro-psychiatrist, and a developmental psychologist in a convincing causality approach, within the context of development. Several pioneering curricula, courses and vignettes will be proposed and briefly introduced as modest attempts to meet the aforementioned needs in contemporary training programs.

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