

## PREMATURE AGING: A DANGER TO LIFE EXPECTANCY AND QUALITY OF LIFE OF THE DISABLED

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Thanks to better, comprehensive long term follow-up systems, to legislation ensuring the rights of the disabled and to the constant improvement of rehabilitation technologies, disabled people now live longer. However, there are signs that they age prematurely, often facing more than only normal aging processes. At least part of their functional reserves and capacities will be reduced. In view of this, all comprehensive rehabilitation efforts must be directed not only towards increased ADL independence, but also towards preventing complications, limiting the extent of these reductions and improving quality of life.

Main issues in premature aging:

1. There are substantial differences in respect to premature aging between people with so called permanent-stable disabilities and those with progressive conditions. The first group includes the spinal cord injured, amputees, cerebral palsied, brain injured patients, etc. The second group covers such conditions as Parkinson's disease, multiple sclerosis, amyotrophic lateral sclerosis, progressive muscular dystrophy, post polio syndrome.
2. The young disabled patient who is aging has different problems compared with old disabled patients who contracted their disability at a later age.
3. Long term changes occurring in the aging disabled are an important phenomenon to be aware of, although whether their origin lies in "wear and tear" processes, in normal or premature aging is unclear.
4. Premature aging or premature morbidity also exists in non-physically challenged persons, for example patients with post traumatic stress disorder (PTSD) or in traumatic blind people.
5. Primary, secondary and tertiary complications are being investigated as possible causes of premature aging. These phenomena may have varying effects on the morbidity and life expectancy of the disabled.
6. These phenomena also influence the homeostasis of the "internal environment" of chronically disabled persons, who endure prolonged physical, psychological and social stress. In this respect a new conception of stress has been developed by McEwen, based on the idea that the far reaching physiological changes following psychological stress combine with the results of physical disability. The problems caused by stress are the fruit of an intricate interaction between the external environment and the body's ability to adapt to new threats. The process of restoring the body's function after stress, the search for a new balance is called *allostasis*. When stress goes on for too long or becomes too much to bear, the usual mechanisms of protection grow overloaded. In the chronically disabled this allostatic load could be a cause of premature aging.
7. Hypoactivity seems to be the common denominator among patients with various disabilities.

A vast and often confusing medical literature discusses the subject of life expectancy of disabled people. Since it seems that the chronically disabled are prone to premature aging, the question arises whether they necessarily have a shortened life expectancy. This is bitterly debated in courts of justice during proceedings on compensation claims.

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