PHTY2007 Summary Notes

Ageing

At the age of 17, the body is at its healthiest biologically. By this age the thymus has prepared the immune system and involution of the thymus marks the start of ageing.

Ageing → a gradual functional decline; normal ageing does not necessarily lead to disability and impairments may be present without disability

> Ageing is dependent on genetics, lifestyle and health

Disability → substantially reduced capacity for learning, communication, social interaction or mobility; ongoing need for support

88% of older people have at least one chronic health condition. The principle of preventative health strategies for older adults is to delay the onset of disability and aim for healthy ageing. 92% of older people reside in the community and 8% in aged care homes. Of the 8%, 90% have a physical disability and 74% have a psychosocial disability.

> Ageing = normal ageing + disease + disuse

Psychosocial factors for ageing – individuals who have lives with purpose are more likely to be successful agers, and participate in activities based around affective ties, work, personal achievement and social status

> Physiotherapy management is based on self-efficacy, through skills mastery, modelling and social persuasion
>
> Active ageing → a way of thinking and working to "optimise opportunities for health, participation and security in order to enhance quality of life as people age"

Changes with ageing

- Loss of physiologic/homeostatic reserve:
  - Older people are more vulnerable to environmental stresses and pressures
- Temperature regulation: increased susceptibility to both hyperthermia and hypothermia
  - Hyperthermia – decreased thirst mechanism, decreased ability to sweat, decreased concentrating ability of the kidneys (to retain water), decreased thermoregulation due to decreased vasodilation
  - Hypothermia – decreased thermogenesis, decreased vasoconstriction in response to cold, decreased intensity of shivering
- Gastrointestinal system:
  - Difficulty chewing and swallowing due to dryness of the mouth
  - Risk of aspiration
  - Slower metabolism of drugs
  - Danger of drug toxicity due to alterations in hepatic function
- Immune system:
  - More vulnerable to infections due to reduced production of thymic hormones (due to involution of the thymus), decline in T-cell immunity leading to a decline in humeral/B-cell immunity, and an increase in auto antibodies (therefore more susceptible to autoimmune diseases)
  - Vaccines become less effective but more important