

# Skin Integrity

Aging has a significant impact on the structure and function of the skin and its ability to retain moisture and protect the body from chemical and physical injury. Changes in an individual's aging skin results in a decrease in the skin's ability to retain moisture. <sup>(3)</sup> A multitude of factors including disease, diet, hydration status, stress and the external environment cause alterations in skin barrier function, potentially putting the individual at risk for impaired skin integrity and skin related disorders. <sup>(3)</sup> Common geriatric skin problems include dry skin (xerosis), eczemas, pruritus, increased fragility and reduced sensation. <sup>(3) (4)</sup>

## Why is it important?

- ≥ 70% of the older population suffer from skin conditions. <sup>(1)</sup>
- Skin damage is generally the result of external forces: pressure, shearing, friction and high moisture levels. <sup>(4)</sup>
- The development of pressure ulcers/wounds is an important determinant of health and an individual's quality of life. <sup>(4)</sup>
- **Pressure ulcers span the continuum of healthcare settings: 26% overall prevalence with 29% in non-acute settings (LTC), 25% in acute care hospitals, 22% in mixed care facilities ( acute and non-acute) and 15% in community settings.** <sup>(5)</sup>
- One in 4 patients in acute care and 1 in 3 in LTC had a pressure ulcer. <sup>(5)</sup> 60% of elders in acute care settings develop pressure ulcers usually within 2 wk. of admission. **In LTC, pressure ulcers are most likely to develop within the first 4 wk. of admission.** <sup>(4)</sup>
- Human burden: includes diminished quality of life, pain, suffering, increased mortality and potential complications such as infection, cellulitis and osteomyelitis. <sup>(4)</sup>
- Financial burden: **average cost of 3 month pressure ulcer treatment in LTC was \$24,050 and \$27, 632 for a 3 month treatment regime in the community.** <sup>(4)</sup>

## Risk Factors

Contributing to impaired skin integrity include age, malnutrition, immobility, inactivity, external pressure, medical conditions ( i.e. diabetes, malignant disease, vascular disease), lifestyle choices (smoking), immune system stress (i.e. Infection), multiple medications, loss of lean body mass, decreased cognitive function( i.e. confusion) and the presence of neurological deficits (i.e. stroke). <sup>(4)</sup>

## Key Considerations

- Prevention and early intervention is a key factor along with the use of a client centered interprofessional team approach. Holistic treatment should be based on evidence based practice and utilization of standardized assessment tools (i.e. Norton Scale, Braden Scale). <sup>(4)</sup>
- Elders require specialized care to avoid missed diagnoses, pressure ulcers, and a range of other potential problems associated with this age group. <sup>(3)</sup>
- Clinicians need to focus on the assessment and management of the elderly with, or at risk for, impaired skin integrity.
- Effective educational programs are required and should be directed at all levels of health care providers to develop capacity and knowledge translation with a focus on the anatomy and physiology of the skin, physiological changes that occur with aging skin, common geriatric skin conditions, skin assessment techniques, and management of common skin care problems.

## References,

1. Barr, J. (2006). *Impaired skin integrity in the elderly*. Retrieved March 20, 2014 from: <http://www.o-wm.com/article/5635?page=0,0>
2. Keast, D., Parslow, N., Houghton, P., Norton, L., Fraser, C. (2006). *Best practice recommendations for the prevention and treatment of pressure ulcers: Update 2006*. Wound Care Canada, 4 (1), 31-43.
3. Ostomy Wound Management (2014). Retrieved March 20, 2014 from: <http://www.o-wm.com/article/5635?page=0,1>
4. Registered Nurses Association of Ontario. Nursing Best Practice Guidelines Program. (2011). *Risk assessment and prevention of pressure ulcers*. Retrieved March 20, 2014 from: [http://rnao.ca/sites/rnao-ca/files/Risk\\_Assessment\\_and\\_Prevention\\_of\\_Pressure\\_Ulcers.pdf](http://rnao.ca/sites/rnao-ca/files/Risk_Assessment_and_Prevention_of_Pressure_Ulcers.pdf)
5. Woodbury, G. & Houghton. ( 2004). *Prevalence of pressure ulcers in Canadian healthcare settings*. Ostomy Wound management , 50 (10), 22-38. Retrieved March 2014 from: <http://cawc.net/images/uploads/resources/Woodbury.pdf>