

**Nursing and Allied Health Abstracts**

**Title:** PRESSURE ULCER RISK FACTORS IN CHILDREN AND ADOLESCENTS WITH SPINA BIFIDA AND SPINAL CORD INJURIES

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**Background:** Pressure ulcers are a known complication in individuals with spina bifida (SB) and spinal cord injury (SCI). With children and adolescents as a known vulnerable population, complicated by these chronic conditions, the importance of identifying pathophysiologic and environmental factors, contributing to skin breakdown is a critical need. Unlike the adult population, there is a paucity of information in pediatrics. Therefore, the purpose of this research study was to evaluate pathophysiologic and environmental factors that increase the risk of skin breakdown in children and adolescents with SB and SCI.

**Method:** Guided by Orem's self-care deficit nursing theory (SCDNT), this descriptive pilot study involved a retrospective chart review from 2000 to 2008. Data were collected from a convenience sample of charts of youth treated for SB and SCI at a Midwestern children's hospital. Descriptive and correlational statistics were used.

**Results:** 76.4 % of the sample (N=31; age=7-21 years) had SB and 22.6% SCI. 48% had sacral ulcers and 45.2 % had foot ulcers; 90.3% of which were pressure related and 9.7% burn related. 35.5% who were strictly wheelchair users admitted to routinely doing pressure relief. 87.1% followed a bowel program and 96.8 % followed a bladder program. All described some degree of incontinence: bladder, 0-6 times per week (29%) or 1-6 times per day (32.3%); and bowel, 0-6 times per week (25.5%) or 1-4 times per day (13%). Correlating ulcer development with incontinence and program compliance, program non-compliance was the only significant variable related to ulcer development.

**Conclusion:** These results suggest further evidence-based research in a larger sample is needed to specifically identify risk factors for pressure ulcer development. Additionally, as compliance is a significant risk factor, finding ways to enhance compliance with health care regimens will have broader implications for improved health, fewer complications, and cost savings in these populations.