Cerebrospinal Fluid Research

Oral presentation

Further development of the adolescent self management and independence scale: AMIS II

Constance F Buran*[1], Timothy J Brei[2], Kathleen J Sawin[3], Suzanne Stevens[4] and Jay Neufeld

Address: [1]Ambulatory Administration, Riley Hospital for Children, 702 Barnhill Drive, Indianapolis, IN, 46202, USA, [2]Developmental Pediatrics, Riley Hospital for Children, Indiana University School of Medicine, 702 Barnhill Drive, Indianapolis, IN, 46202, USA, [3]College of Nursing, University of Wisconsin-Milwaukee and Children's Hospital of Wisconsin, Milwaukee, Wisconsin, Box 413, Milwaukee, WI 53217 USA and [4]2924 Brook Road, Richmond, VA 23220. USA

Email: Constance F Buran* - cburan@clarian.org

* Corresponding author

Background
Measuring outcomes of care remains a challenge in providing care to families who have a child with spina bifida (SB). One goal frequently cited by family and clinicians is the development of self-management and independence skills in adolescents. The purpose of this paper is to report data on the expanded version of a newly developed tool designed to capture these components.

Materials and methods
Data for this analysis comes from a multi-site descriptive study focused on adaptation and secondary conditions in adolescents ages 12–21 with spina bifida (SB). Separate Interviews of adolescents and a parent were conducted by telephone using computer assisted direct entry. The 17 item Adolescent Self-Management and Independence Scale (AMIS II), expanded from the 10 item first version, was used to measure the amount of assistance the adolescents needed in the tasks. The AMIS II was rated using a 7-point response category (1 total assistance to 7 no assistance) by data collectors who were health care professionals.

Results
Factor analysis revealed three subscales explaining 58% of the variance in the parent's AMIS scores. The factor analysis of adolescent data generally supported the subscales. Two of the factors were identified in the analysis of the original 10-item instrument. Generally assistance scores reflect need for overall moderate to large amount of assistance (M = 3.5, SD = .5). Adolescents needed the least assistance on general independence subscale (includes safety, access, problem solving, advocacy and communication items M = 4.9, SD = 1.6) and minimal assistance in self management activities (knowledge of medication, able to explain condition to others, knowledge and prevention of complications and overall independence in managing condition M = 4.11, SD = 0.6). Finally adolescents needed maximal assistance with specific independence activities (managing money, obtaining supplies for self-care, planning a meal, managing household task, making health care appointments, and managing insurance (M = 2.4, SD = 38). Reliability of the subscales (a = .70 to .83) and the total scale for both parent and teen remain high (a = .87 -0.89).

Conclusion
This analysis provides preliminary support for the reliability and validity of the 17-item AMIS. Although this instrument requires rating by a health care provider, it can be administered fairly quickly. Further it provides data that allows the individual's families and providers to measure

the development of critical skills for transition to young adulthood.