



Research Commentary

Translational research – Challenges of adolescent healthcare transitions and the unintended consequences of adolescent risk-taking behavior



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Adolescents are challenging by nature with respect to their developmental changes, decision-making, and risk-taking behaviors. Adolescent risk-taking behaviors often lead to unintended consequences that negatively affect their health. Substance use/abuse challenges adolescents' decision-making ability and may create unintended long-term consequences, such as poor school performance, unsafe driving, unprotected sexual activity, unplanned pregnancy, and sexually transmitted infections (STIs). Adolescent risk-taking behaviors may negatively impact acute or chronic health problems by creating additional challenges with respect to adolescent developmental needs, as well as problems with adherence to treatment and self-management (Christian, 2019a, 2019b). In this way, the unintended consequences of adolescent risk-taking behaviors and substance use/abuse create challenges for adolescent health as well as challenges for pediatric nursing.

As adolescents and young adults with chronic conditions and disabilities are surviving longer, adolescents are challenged to transition from pediatric to adult healthcare. To meet the healthcare transition needs of adolescents and young adults with chronic conditions and disabilities, pediatric nurses have developed new standards of care, as highlighted in the *Society of Pediatric Nurses'* position statement and transition guideline (Betz, 2017). As a result, the transition of adolescents and young adults from pediatric to adult healthcare creates additional challenges for pediatric nursing.

New insights and evidence about adolescent risk-taking behavior and substance use/abuse, as well as new intervention strategies are based on evidence from nursing research, quality improvement projects, and evidence-based practice projects result in improved quality of pediatric nursing care (Hockenberry, Wilson, & Rodgers, 2019; Melnyk & Fineout-Overholt, 2018; Polit & Beck, 2018). Translation of new evidence and intervention strategies into pediatric nursing practice results in improvements in the quality of care for children, adolescents, and their families.

In this issue of the *Journal of Pediatric Nursing*, 9 of 14 articles focus on adolescents with respect to adolescent risky behaviors and substance use/abuse, as well as the transitions of adolescents and young adults from pediatric to adult healthcare. Additionally, five articles focus on pediatric quality of care and patient safety, including the development of a sedation weaning protocol; children's and adolescents perspectives

about medical errors; the development and evaluation of an instrument to measure adolescent satisfaction with hospital quality of care; standardization of community-acquired central line blood stream infections (CA-CLABSIs) follow-up and reduction; and an educational immersion simulation intervention to improve readiness for medical emergencies in primary care settings. In this way, the articles in this issue present new evidence and information for improving pediatric nursing care for children and adolescents:

- A six-month, pilot feasibility intervention study was conducted using text messaging with adolescents ($N = 13$; ages 14 to 17 years) with chronic conditions from pediatric specialty clinics (e.g., Irritable Bowel Disorder, Cardiology, and Type I Diabetes) to facilitate their transition from pediatric to adult healthcare (Beaudry, Consigli, Clark, & Robinson, 2019). Based on the 2011 Six Core Elements of Healthcare Transitions *Got Transition* program recommendations by the *American Academy of Pediatrics* (AAP), *American Academy of Family Physicians* (AAFP), and *American College of Physicians* (ACP) (AAP, AAFP, ACP, 2011), the text messaging intervention was designed to increase engagement among adolescents, as well as deliver educational content focused on self-care management and transition to adult healthcare. Development of the text messaging intervention was based on relevant research literature, case studies, and semi-structured interviews and observations of over 60 key stakeholders, including patients, caregivers, healthcare providers, and other clinical staff. The text messaging intervention was delivered to adolescents with chronic conditions who received care at three pediatric specialty clinics at a university children's hospital. Surveys were administered to adolescents to evaluate the feasibility and acceptability of the text messaging intervention. An introductory workshop was used to orient adolescents to the transition of care activities through peer-to-peer learning and creative activities in which they developed autobiographical collages about their individual timelines for transition to adult care. Two-thirds of the participants reported that the workshop was helpful in teaching them about transition activities. Results indicated that the overall mean response rate to the weekly text messages over the six-month study was 97%. Thirteen adolescents completed the initial survey and 12 adolescents completed the final survey. Adolescents reported that the text messages motivated them to respond due to their "ease of use" and "friendly" tone, and that they were more likely to recommend the text messaging program to their peers. Thus, the text messaging intervention was found to be feasible

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and acceptable to adolescents with chronic conditions in engaging them in transition activities.

- A descriptive, quantitative was employed to conduct a national survey of pediatric nurses' ($N = 1814$) to obtain their perspectives of the roles and responsibilities in healthcare transition planning for adolescent youth and young adults with chronic illness and/or disability (Disabato, Mannino, & Betz, 2019). Thirteen key healthcare transition planning activities were identified through a review of the relevant research literature, best practices, and national resources, including position papers and recommendations by pediatric nursing professional organizations (e.g., *American Nurses Association, National Association of Pediatric Nurse Practitioners, Society of Pediatric Nurses*), as well as the *National Alliance to Advance Adolescent Health's Got Transition* program. From these sources, an online survey was developed using the key healthcare transition planning activities and administered to pediatric nurses ($N = 1814$) from the membership of two professional nursing organizations (e.g., *Pediatric Nursing Certification Board; Society of Pediatric Nurses*). The sample was comprised of pediatric nurses all of whom were registered nurses (100%) with the majority (93%) having professional practice certification. Eighty-five percent of the pediatric nurse respondents reported that their job descriptions did not include transition planning for adolescents with chronic illness and/or disability. Results of the survey indicated that the 13 healthcare transition planning activities performed by pediatric nurses were all perceived as having high importance, with educating adolescent youth about self-management abilities identified as being the most important by 69% nurses ($n = 899$). Correlation analyses indicated moderate associations between nurses' job description and total importance ($r = 0.448, p < .01$), and total knowledge of the 13 healthcare transition planning activities ($r = 0.506, p < .01$). A moderate association was found between total knowledge of 13 healthcare transition planning activities and total importance ($r = 0.466, p < .01$). Regression analyses demonstrated that statistically significant predictors of nurses' knowledge of 13 healthcare transition planning activities included professional role, transition planning job description, specialized healthcare transition training, and time with adolescent patients, explaining 17.9% of the variance in the model ($p < .001$). Significant predictors of the perceived importance of 13 healthcare transition planning activities included professional role, transition planning job description, specialized healthcare transition training, time in direct patient care, time with adolescent patients, and knowledge of healthcare transition planning activities, explaining 31% of the variance in the model ($p < .001$). Thus, the results suggest the importance of identifying healthcare transition planning activities as part of the pediatric nurses' role and responsibilities, as well as highlighting pediatric nurses' need for more knowledge about the 13 key healthcare transition planning activities for providing care for adolescents with chronic illness and/or disability.
- A descriptive, exploratory analysis of quality of life in adolescents and young adults (AYA) (ages 12 to 25 years) with and without Spina Bifida was conducted as part of a larger multi-site, mixed-methods study of secondary conditions and adaptation in families ($N = 209$) with AYA with and without Spina Bifida and their parents (Ridosh, Sawin, Roux, & Brei, 2019). This descriptive report is of the findings from a single, open-ended question on the meaning of quality of life from the perspective of AYA with Spina Bifida ($n = 103$) and AYA without Spina Bifida ($n = 94$), as well as the parents of AYA with Spina Bifida ($n = 112$) and AYA without Spina Bifida ($n = 97$). Telephone interviews were employed with AYA and their parents; content analysis was used to identify categories and themes in the open-ended responses. Qualitative results of the responses to the meaning of quality of life yielded the following eight shared categories across the four groups of AYA and their parents: (a) *an engaged family*; (b) *a positive life*, (c) *the goal of independence*, (d) *being healthy*, (e) *essential needs for living*, (f) *having friends*, (g) *relying on faith*, and (h) *romantic relationships*. It is important to note that AYA with

Spina Bifida did not identify romantic relationships as important for their quality of life. For both groups of parents, a unique category emerged, *doing what they want to do*. Thus, the results highlight the centrality and importance of the family to quality of life, as perceived by AYA with and without Spina Bifida and their parents.

- An exploratory study using a grounded theory approach was conducted to examine children's mental health providers' perspectives about transition to adult care for young adolescents (ages 12 to 15 years) in the Canada (Schraeder, Reid, & Brown, 2019). In-depth interviews were conducted with children's mental health providers ($N = 10$) focused on transition to adult care. The results demonstrated three primary themes: (a) *beliefs about the chronic course of common children's mental health problems*, (b) *perceived challenges of caring for youth with ongoing mental health concerns in community mental health settings*, and (c) *reluctance to discuss transitions to adult care*. Children's mental health providers were reluctant to consider transition for younger clients (<16 years of age) due to their uncertainty about which adolescents would need mental health services, when the discussion would be most appropriate, and what adult mental health services would be available. Thus, children's mental health providers in Canada identified a lack of treatment capacity for youth transitioning to adult mental health care and the difficulty of predicting which adolescents would need adult care. These findings provide guidance for the development of follow-up mental health care services as adolescents transition into adulthood.
- A pilot study was employed to examine the protective effects of Judaism on college students' risky behaviors, including sexual activity, alcohol use, tobacco/nicotine use, and other drug use (Neuman, Simonovich, & Amer, 2019). An online survey was conducted with Jewish U.S. college students ($N = 15$; ages 18 to 24 years; 53% female) who attended a middle school (grades 6 to 8) health education program including sexual education and drug prevention education at a Jewish day-school. Results indicate that two-thirds of the participants (66.7%) identified as Conservative Judaism; 74% of students reported that Judaism was extremely or very important to them. Regarding risky behaviors, alcohol use was reported by 86.6% ($n = 13$) of the students with 53.3% ($n = 8$; 5 females, 3 males) reporting binge drinking in the 30 days prior to the survey. Female students binge drank more frequently than males, on more days, and had higher drink counts in a row. Of those students who did not binge drink ($n = 7$), six practiced Conservative Judaism and one Reform Judaism. With respect to tobacco/nicotine use, only one-third (33%) reported ever trying cigarettes, while 40% of the students used electronic vaping devices. Seventy-three percent ($n = 11$) reported marijuana use with 10 students using marijuana in the past 30 days. One-third (33%) of the students who did not use marijuana in the past 30 days identified with Conservative Judaism. With respect to sexual activity, five male (33%) students reported no sexual activity, three identified as Conservative, one Reconstructionist, and one Reform Judaism. Only five students (2 male, 3 female) reported using condoms at their last sexual encounter. Four female students and two male students reported drinking alcohol or using drugs before their last sexual encounter. Thus, the results of the pilot study suggest that for college students who received sexual education and drug prevention education in middle school at a Jewish day-school, Judaism and identifying as being more religious served as protective factors for engaging in risky behaviors.
- An interactive computer simulation program for adolescent screening, brief intervention, and referral to treatment (SBIRT) for substance use was implemented in an undergraduate nursing program (Burmester, Ahluwalia, Ploutz-Synder, & Strobbe, 2019). The effectiveness of the adolescent SBIRT for substance use was evaluated using pre- and post-surveys of undergraduate nursing students ($N = 144$; 93.75% female; 19.44% minority). Of the 144 students, 125 of the students completed both the pre- and post-surveys. The results demonstrated significant improvement in overall student perceived self-

competence (95.87%), confidence (81.97%), and readiness (80.83%) to deliver SBIRT. Students reported positive feedback about the simulation experience. Thus, adolescent SBIRT for substance use with computer-based simulation training was demonstrated to be effective in improving undergraduate nursing outcomes.

- As part of a larger intervention study to engage adolescents and young adults (15 to 24 years of age) in changing frequent marijuana use through Motivational Enhancement Therapy (MET) in primary care, preliminary descriptive findings are reported (Kells, Burke, Parker, Jonestrask, & Shrier, 2019). Adolescents and young adults (AYA) ($N = 56$; 61% female; 46% Black/non-Hispanic; 30% Hispanic; 14% White/non-Hispanic; and 9% Asian) who use marijuana frequently (≥ 3 times/week) participated in the study during two MET sessions designed to change frequent marijuana use. The primary reason for marijuana use as identified by adolescents and young adults was emotional coping (68%), with negative feelings identified as a top-3 trigger for marijuana use (82%). Adolescents and young adults were categorized according to stage of change for reducing marijuana use: Pre-contemplation (35%), Contemplation (35%), and Post-contemplation (30%) stages. Those in the Contemplation stage were more likely to identify the positive impact on relationships for using less marijuana, as compared to the Pre-Contemplation group (62.5% vs. 6.3%; $X^2 = 11.221$, $p = .001$), as well as the negative impact relationships for using less marijuana (62.5% vs. 25%; $X^2 = 4.571$, $p = .033$). Thus, the MET intervention program was effective in reducing frequent use of marijuana among adolescents and young adults.
- Opioid seeking behavior and diversion of opioid medications by two adolescent patients hospitalized in an acute care setting was explored through two case studies to illustrate the complex healthcare management issues associated with adolescents with chronic pain and the potential for misuse of prescription medications (McNeely, 2019). These case studies highlight the need for pediatric nurses to monitor adolescents for signs associated with substance misuse and/or substance use disorder. Moreover, pediatric nurses need to assess and screen adolescents with chronic pain for potential misuse of prescription drugs and to identify possible substance use disorder.
- A review article is presented focused on the stigma associated with opioid use disorders in adolescents that limits naloxone prescribing (Carson, 2019). The authors identified barriers related to treatment of opioid use disorders including the resistance of healthcare providers to discuss substance abuse with adolescents and their families, as well as the stigma associated with opioid use. Further, this resistance of healthcare providers to acknowledging the existence of opioid use disorders among adolescents serves as a barrier to treatment and prevents prescription of naloxone to prevent overdose-associated death.
- A quality improvement project based on the Plan-Do-Study-Act (PDSA) model was employed to determine the effectiveness of an evidence-based post-PICU sedation weaning protocol to increase safety and reduce medication errors among children hospitalized post-critical illness in a large academic pediatric tertiary care center with four intensive care units (ICUs) (Solodiuk, Greco, O'Donnell, Morrill, & Curley, 2019). A task force of nurses, nurse practitioners, physicians, and pharmacists from the ICUs developed a sedation-weaning intervention. The sedation-weaning guidelines were communicated to staff and parents prior to implementation of the intervention. Retrospective data from a 5-year period (July 2013 to July 2018) following 1080 patients to discharge or the end of the weaning period were analyzed to compare the effectiveness of the intervention. Of those 1080 patients, 1487 weaning events were identified with 19% of the patients having more than one weaning event. Results comparing pre- and post-intervention indicated statistically significant differences in the number of patients discharged on home weaning from opioids and benzodiazepines ($p < .005$) with a decrease from 11% ($n = 24$) to 3% ($n = 7$) of patients; significant decreases in methadone use at discharge declined from 7% ($n = 16$) to 0% ($p = .03$). Children demonstrated significantly more mild-to-moderate withdrawal symptoms post-intervention (21%) compared to pre-intervention (11%, $p < .005$), although severe withdrawal symptoms remained low. However, there were no statistically significant differences in length of stay (LOS) although median LOS decreased throughout the study. Thus, the evidence-based post-PICU sedation weaning protocol was effective in weaning pediatric patients from sedatives post-critical illness at discharge with modest increases in withdrawal symptoms.
- An exploratory qualitative approach was employed to explore children's and adolescents' perspectives about medical errors and disclosure of errors (Koller, Binder, Alexander, & Darch, 2019). Twenty participants included children ($n = 10$, ages 8 to 12 years; 3 males, 7 females) and adolescents ($n = 10$, ages 13 to 18 years; 2 males, 8 females) with chronic conditions who participated in semi-structured interviews. Multiple projective techniques including art and play-based methods, visual aids, and vignettes were used to facilitate discussion with younger children. Older participants were presented multiple vignettes representing increasing levels of harm with respect to medical errors during the interview. Thematic analysis resulting in children and adolescents providing an overview description of errors, their causes, and levels of harm. Three stages of disclosure were identified: (a) Pre-disclosure process; (b) Disclosure; and (c) Post-disclosure. Two emergent themes identified by participants were child rights and secret errors. The findings indicate that children and adolescents with chronic conditions want to know about errors from the person responsible and expect an apology as well as genuine remorse. However, children and adolescents acknowledged that everyone makes mistakes. Thus, these findings highlight the importance of disclosure of medical errors to children and adolescents with chronic conditions.
- An exploratory descriptive study using Q-sort methodology was conducted to determine perceptions of adolescents and young adults ($N = 60$; ages 12 to 21) about hospital care for the development of an adolescent hospital quality of care survey (AHQOCS) (Lapp, 2019). After an extensive review of the published literature from 1998 to 2017, 44 articles met the inclusion criteria. From this review, 56-item statements were developed into four domains comprised of 14-items each with respect to hospital quality of care. The four domains included environmental comfort, physical and psychological comfort, dignity and respect, and autonomy. A panel of five content experts established content validity of the four domains with positive endorsement of the 56-items ($I-CVI = 0.0996$). Using Q-sort methodology, the 56-items were presented to adolescents to obtain their perceptions of hospital care to rank the importance of each statement using a visual Q-sort board to display the items. Results indicate that adolescents ranked the 56-items within each of the four domains identifying the most important quality aspect, as follows: (a) **environmental comfort**: *having family stay*; (b) **physical and psychological comfort**: *trust in the nurse to take care of you*; (c) **dignity and respect**: *nurse and doctor clearly told you what would happen to you*; and (d) **autonomy**: *able to tell the doctor what was wrong with you and able to ask the doctor to explain what he/she said*. Analysis of the Q-sort rankings reduced the number of items from 56-items to 26-items based on correlation analysis and identification of similarities and redundancies. Thus, the 26-item, final instrument measuring adolescent hospital quality of care survey (AHQOCS) was developed and content validity was established. Moreover, adolescents were able to identify their perceptions of quality of care during hospitalization important for guiding clinical practice.
- A quality improvement project was conducted to standardize and develop an organizational process at a large children's hospital to reduce community-acquired central line blood stream infections (CA-CLABSI) and develop processes to track CA-CLABSIs, collaborate with, and improve awareness of CA-CLABSIs in home healthcare agencies in the 12 surrounding counties (Patton, Cardwell, & Falder-Saeed,

2019). Standards of care for CA-CLABSIs were developed by an organizational team to establish standards of care for CA-CLABSI follow-up and reduction. Best practices were identified resulting in the development of a CA-CLABSI resource booklet, screening tool for risks associated with CA-CLABSIs to increase awareness. With the implementation of standardized best practices for CA-CLABSIs, the results of the QI project demonstrated a 30% reduction in the total number of CA-CLABSIs from 2016 through 2017. This reduction in potential CA-CLABSIs reflected projected preventable charge avoidance of \$567,824. Thus, standardization of best practices for CA-CLABSIs and surveillance of central line care in a large children's hospital were successful in decreasing CA-CLABSIs, as well as enhancing collaboration with home health agencies.

- An evidence-based practice project using simulation immersion scenarios was employed to improve readiness through increased self-competence and confidence in responding to medical emergencies among healthcare clinicians in primary care settings (Monachino, Caraher, Ginsberg, Bailey, & White, 2019). In collaboration with ambulatory care nurses and medical leaders, certified healthcare simulation educators developed an educational session to improve competence and confidence in responding to an emergency. The educational intervention included full immersive simulation scenarios for a patient experiencing a seizure and a patient experiencing anaphylaxis. Participants ($N = 211$) were surveyed pre- and post-educational immersion simulation sessions at 30 pediatric primary care sites over 14-months. The participants included healthcare providers ($n = 47$; physicians and nurse practitioners combined); registered nurses and licensed practical nurses ($n = 71$ combined); medical assistants ($n = 16$); patient service representatives and practice management leaders ($n = 65$); social workers and other clinic staff ($n = 12$). Surveys were analyzed by healthcare role to determine whether or not there were significant changes in self-reported competence and confidence in handling emergency situations after participation in the educational immersion simulation session. Statistically significant differences in mean scores were found for all groups except medical assistants with demonstrated improvements in self-competence and confidence in handling emergency situations in primary care setting. Thus, the efficacy of an educational immersion simulation intervention in improving handling of emergency medical situations in primary care settings was demonstrated.

The challenges of adolescent healthcare were highlighted by the articles in this issue. The challenges of adolescent and young adult healthcare transitions to adult care were addressed. Additional articles highlighted the unintended consequences of adolescent risk-taking behaviors and substance use/abuse that lead to poor health outcomes among adolescents. To that end, new intervention strategies were developed and tested with new evidence translated into pediatric nursing practice to meet these challenges and improve the quality of care, while addressing the unintended consequences of adolescent risk-taking behaviors. Although the challenges of providing quality nursing care to adolescents remain, the evidence and new intervention strategies presented in these articles provide direction for improving adolescent

health and preventing the unintended consequences of adolescent risk-taking behaviors.

References

- American Academy of Pediatrics, American Academy of Family Physicians, American College of Physicians, Transitions Clinical Report Authoring Group, Cooley, W. C., & Sagerman, P. J. (2011). Supporting the healthcare transition from adolescence to adulthood in the medical home. *Pediatrics*, 128(1), 182–200. <https://doi.org/10.1542/peds.2011-0969>.
- Beaudry, J., Consigli, A., Clark, C., & Robinson, K. J. (2019). Getting ready for adult healthcare: designing a program to coach adolescents with special health need through the transitions of care. *Journal of Pediatric Nursing*, 49, 85–91.
- Betz, C. L. (2017). SPN position statement: Transition of pediatric into adult care. *Journal of Pediatric Nursing*, 35, 160–164.
- Burmester, K. A., Ahluwalia, J. P., Ploutz-Synder, R. J., & Strobbe, S. (2019). Interactive computer simulation for adolescent screening, brief intervention, and referral to treatment (SBIRT) for substance use in an undergraduate nursing program. *Journal of Pediatric Nursing*, 49, 31–36.
- Carson, L. (2019). Stigma associated with opioid use disorders in adolescents limits naloxone prescribing. *Journal of Pediatric Nursing*, 49, 92–96.
- Christian, B. J. (2019a). Translational research – Adolescents and young adults with chronic conditions and disabilities striving for independence in self-management and navigating healthcare transitions. *Journal of Pediatric Nursing*, 47, 159–164.
- Christian, B. J. (2019b). Translational Research – Facilitating transition of adolescents with chronic conditions to adult healthcare and improving the quality of pediatric nursing care for hospitalized children. *Journal of Pediatric Nursing*, 48, 114–117. <https://doi.org/10.1016/j.pedn.2019.08.019>.
- Disabato, J. A., Mannino, J. E., & Betz, C. L. (2019). Pediatric nurses' role in healthcare transition planning: National survey findings and practice implications. *Journal of Pediatric Nursing*, 49, 60–66.
- Hockenberry, M. J., Wilson, D., & Rodgers, C. C. (2019). *Wong's nursing care of infants and children* (11th ed.). St. Louis: Elsevier.
- Kells, M., Burke, P. J., Parker, S., Jonestrask, C., & Shrier, L. A. (2019). Engaging youth (adolescents and young adults) to change frequent marijuana use: Motivational Enhancement Therapy (MET) in primary care. *Journal of Pediatric Nursing*, 49, 24–30.
- Koller, D., Binder, M. J., Alexander, S., & Darch, J. (2019). "Everybody makes mistakes": Children's views on medical errors and disclosure. *Journal of Pediatric Nursing*, 49, 1–9.
- Lapp, V. (2019). The patient's voice: Development of an adolescent hospital quality of care survey (AHQOCS). *Journal of Pediatric Nursing*, 49, 43–50.
- McNeely, H. L. (2019). Opioid seeking behaviors and diversion in hospitalized pediatric patients: A case series. *Journal of Pediatric Nursing*, 49, 67–71.
- Melnyk, B. M., & Fineout-Overholt, E. (2018). *Evidence-based practice in nursing and healthcare: A guide to best practice* (4th ed.). Philadelphia: Wolters Kluwer/Lippincott, Williams & Wilkins.
- Monachino, A. M., Caraher, C., Ginsberg, J., Bailey, C., & White, E. (2019). Medical emergencies in the primary care setting: An evidence-based practice approach using simulation to improve readiness. *Journal of Pediatric Nursing*, 49, 72–78.
- Neuman, M. E., Simonovich, S. D., & Amer, K. (2019). Exploring the protective effects of Judaism on risky behaviors in college students: A pilot study. *Journal of Pediatric Nursing*, 49, 79–84.
- Patton, L. J., Cardwell, D. L., & Falder-Saeed, K. (2019). Standardize, engage, and collaborate: An initiative to reduce community acquired central line blood stream infections across the continuum of care. *Journal of Pediatric Nursing*, 49, 37–42.
- Polit, D. F., & Beck, C. T. (2018). *Nursing research: Generating and assessing evidence for nursing practice* (10th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Ridosh, M. M., Sawin, K. J., Roux, G., & Brei, T. J. (2019). Quality of life in adolescents and young adults with and without Spina Bifida: An exploratory analysis. *Journal of Pediatric Nursing*, 49, 10–17.
- Schraeder, K. E., Reid, G. J., & Brown, J. B. (2019). An exploratory study of children's mental health providers' perspectives on the transition to adult care for young adolescents in the Canadian context. *Journal of Pediatric Nursing*, 49, 51–59.
- Solodiuk, J. C., Greco, C. D., O'Donnell, K. A., Morrill, D. R., & Curley, M. A. Q. (2019). Effect of a sedation weaning protocol on safety and medication use among hospitalized children post critical illness. *Journal of Pediatric Nursing*, 49, 18–23.