

LETTER TO THE EDITOR

Growing up in a virtual world – A new look for transitioning to adult transplant care

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

AYA solid organ transplant recipients are confronted with unique life stressors that may negatively impact allograft outcomes. Regardless of age at time of transplant, AYA transplant recipients have a higher risk of graft loss compared with other age groups, partly related to medical non-adherence.^{1,2} Transition from pediatric to adult health care often occurs during, and potentially intensifying, this challenging time. The global COVID-19 pandemic has compounded anxiety and stressors surrounding major life events, adding uncertainty and lack of normalcy for this population. Fortunately, pediatric solid organ transplant recipients with COVID-19 infection appear to have a similar prognosis to immunocompetent peers³; however, the pandemic has impacted post-transplant management, including reduced access to multidisciplinary care and education/support.⁴

In 2016, our center implemented a comprehensive T₂AC curriculum for AYA solid organ transplant recipients at Children's Hospital Colorado. This curriculum consists of longitudinal education, readiness assessment, outreach programming, and a daylong seminar for AYAs and families focused on education from the pediatric and adult transplant multidisciplinary teams. Comparing AYA recipients transitioned pre-T₂AC, "graduates" of the curriculum demonstrate improved transplant outcomes in the first year following transition as evidenced by decreased rejection episodes, graft loss, loss to follow-up, ED visits and inpatient admissions, and fewer "bounces-backs" to the pediatric center.⁵


Recognizing the need to continue preparing our AYA population for transition, we aimed to continue the T₂AC curriculum despite limitations created by social distancing. Therefore, we adapted the Transitions Seminar component of the program to a virtual platform. This seminar provided virtual didactic education, presented in an interactive "game show" format, to discuss differences between adult and pediatric care, medication management, insurance and health-care costs, substance and alcohol use, sexual health, and mental health. As well, breakout sessions allowed for interaction with providers and peers and for support from transplant psychology.

Despite change in structure and platform, virtual programming was implemented with promising results. Participants were invited via mail, MyChart, and phone call. This event boasted the highest attendance to date with 25 AYA recipients (8 kidney, 8 liver, 9 heart;

mean age 18 years) plus additional family members, likely due to the convenience of joining from home. Active participation was notably increased, potentially related to multiple modes of interaction (eg, private/group chat message) and minimized anxiety by removing in-person interaction. A post-course survey indicated positive reception with an average response of 7.7/10 (10 = Very Likely) to "How likely are you to attend a similar event again in the future?" The average response to "After attending this event, how prepared do you feel for transitioning to adult care?" of 6.7/10, comparable to 7.2 for prior in-person events, suggests change in venue did not reduce impact. Additional feedback encouraged increased time with adult transplant providers and increased opportunity for questions and answers. Given the overall positive experience, we plan to maintain and grow the virtual nature of our T₂AC Seminar through the pandemic and beyond, hoping to broaden our audience and strengthen our educational mission.

AUTHOR CONTRIBUTION

Mary Moss Chandran: Contributed to conceptualization, resources, and writing—drafting and revision; Eliza Blanchette: Contributed to conceptualization, writing—review and editing, and final approval; Adrienne Sikora: Contributed to conceptualization, resources, and writing—review and editing; Megan Bisek: resources, and writing—review and editing; Elizabeth Steinberg Christofferson: Contributed to resources, and writing—review and editing; Margret Bock: Contributed to conceptualization, resources, writing—drafting and revision, and final approval.

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REFERENCES

1. Dobbels F, Ruppert T, De Geest S, Decorte A, Van Damme-Lombaerts R, Fine RN. Adherence to the immunosuppressive regimen in pediatric kidney transplant recipients: a systematic review. *Pediatr Transplant*. 2010;14(5):603-613.
2. Foster BJ, Dahhou M, Zhang X, Platt RW, Samuel SM, Hanley JA. Association between age and graft failure rates in young kidney transplant recipients. *Transplantation*. 2011;92(11):1237-1243.
3. Teoh CW, Gaudreault-Tremblay MM, Blydt-Hansen TD, et al. Management of Pediatric Kidney Transplant Patients During the COVID-19 Pandemic: Guidance From the Canadian Society of Transplantation Pediatric Group. *Can J Kidney Health Dis*. 2020;7:2054358120967845.
4. Goss MB, Galván NTN, Ruan W, et al. The pediatric solid organ transplant experience with COVID-19: An initial multi-center, multi-organ case series. *Pediatr Transplant*. 2020:e13868.
5. Moss M, Steinberg E, Sikora A, McKinnon K, Goebel J, Bock M. Implementation of a Longitudinal Comprehensive Multidisciplinary Transition Program and Seminar – Safely Making the Long Leap to the Adult World. *Am J Transplant*. 2019;19(suppl 3):971.

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