

The Impact of Service Learning on Medical Student Perceptions on Children with Disabilities



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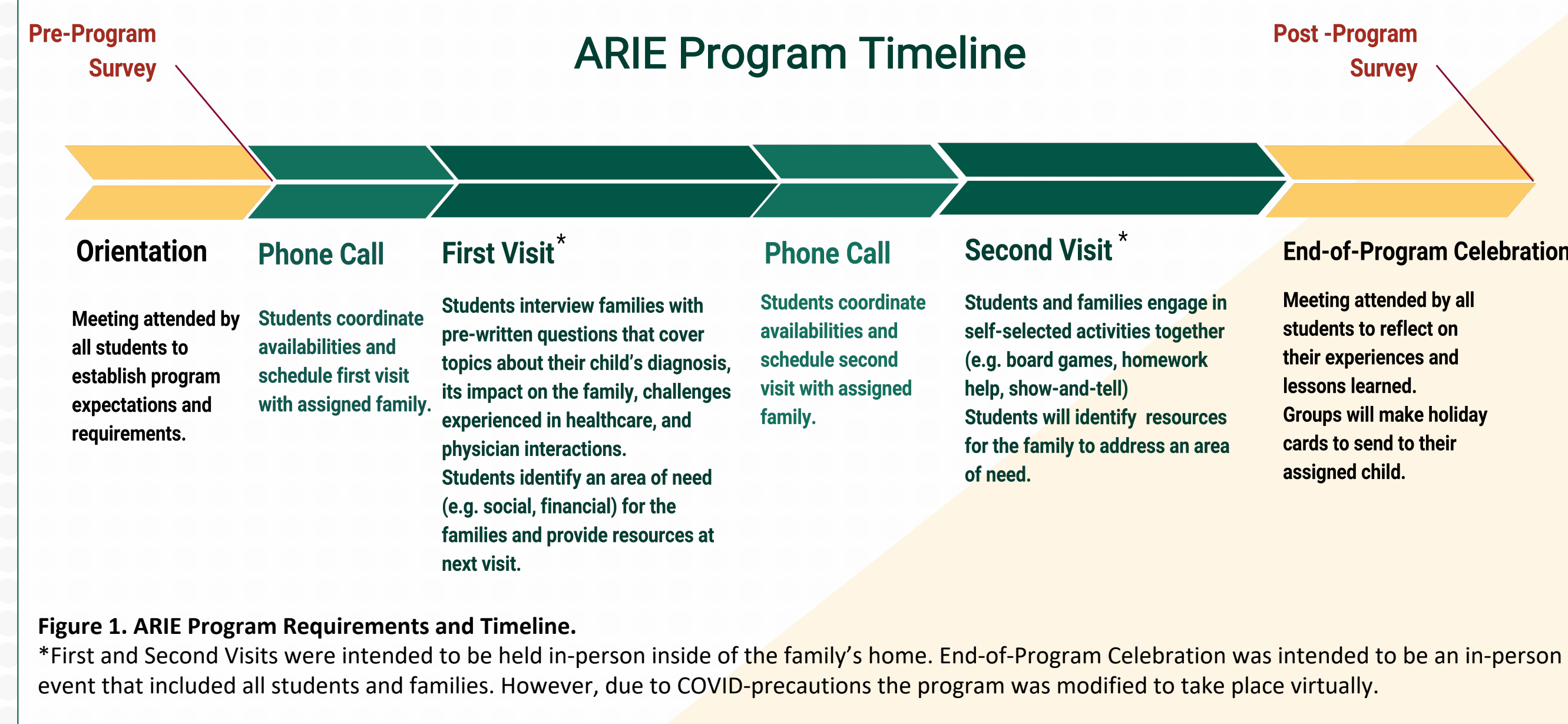
INTRODUCTION

Studies have reported that some medical students hold negative attitudes toward patients with disabilities and are uncomfortable interacting with them [1]. These attitudes can translate into poor health outcomes for patients. Children with developmental disabilities have unique needs and their families report dissatisfaction with their primary physicians stemming from poor communication and lack of understanding of their child's condition and its impact on family life [2]. Early interactions with this population can improve attitudes and promote better communication and understanding between both parties [1]. When service learning is integrated into medical curriculum, it has been shown to enhance medical education through improved communication, understanding of public determinants of health and policy, and social responsibility [3]. Many medical programs do not have a specific curriculum that addresses caring for children with developmental disabilities.

The ARIE program is a WSUSOM student-led program that provides medical students the unique opportunity to interact with a child with a developmental disability and their family over the course of 3 months.

METHODS

- 48 WSUSOM first- and second-year medical students voluntarily participated in the ARIE Program. Two to three medical students are assigned to one child with a developmental disability (e.g. autism, Down Syndrome, fetal alcohol syndrome) and their family.
- The families and students engage in 2 phone calls, two video conference sessions, and an end-of-program celebration*, which allows several opportunities for medical students, children, and their families to interact (Figure 1).
- Medical students complete a 30-item Qualtrics pre- and post-program survey. The pre- and post-program surveys are identical and cover topics related to perceptions, comfort level of interaction, and past experiences with people with disabilities.
- The survey will be scored according to Synmons et al [4], the original authors of the derived survey from whom we have gotten written permission to use. Bivariate analyses with paired *t*-test is used to compare pre- and post-program survey performance. A Chi-Square test is used to analyze a portion of the pre-program and post-program data with a *P* value of 0.05 considered significant.
- This study protocol has been approved by WSU IRB Committee (Protocol # IRB-21-08-3850).



PRELIMINARY RESULTS

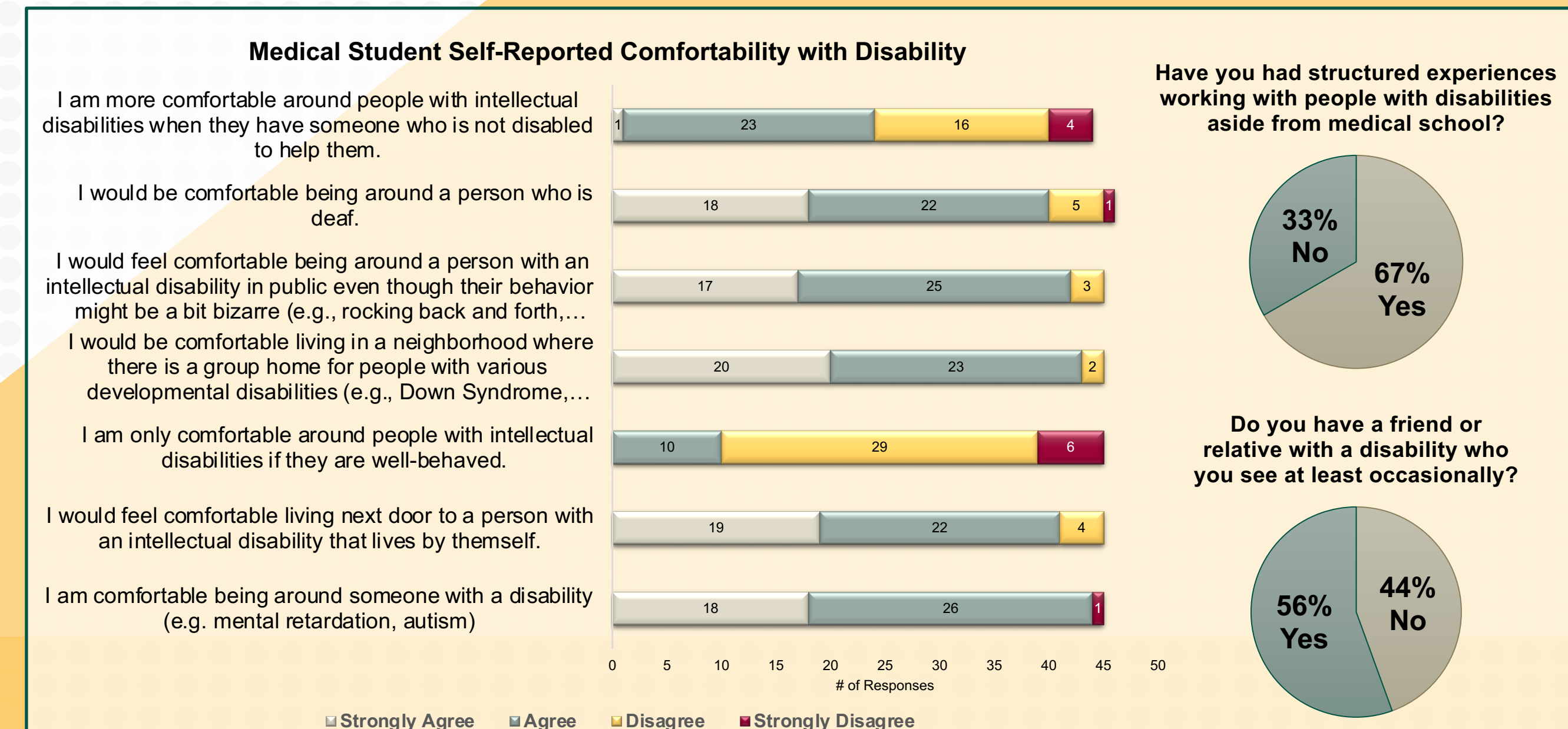


Figure 2. Pre-Program Survey Responses. Only a portion of data is shown and post-program data is underway.

According to Pre-Program Survey Data:

- 67% of respondents have had previous structured experiences working with individuals with disabilities while 33% have not.
- 56% of respondents have a friend or relative with a disability who they see at least occasionally while 44% do not.
- >50% of respondents feel more comfortable around people with intellectual disabilities when someone who is not disabled is present to help them.
- A majority of respondents already feel comfortable being in the presence of an individual with a disability.

This study is ongoing, therefore we have yet to obtain post-program data to compare the impact of the ARIE Program on these metrics.

CONCLUSION & FUTURE DIRECTIONS

- The ARIE Program is a service learning opportunity that provides a positive point of contact between the healthcare community and families who have a child with developmental disability. In addition, the ARIE Program aims to improve medical student empathy, communication, and disability awareness.
- The ARIE Program is an important addition to medical education because it addresses medical student perceptions and understanding for children with developmental disabilities and their families. This, in turn, is hypothesized to improve patient care and satisfaction in clinical practice.
- Results of this ongoing study will be used to evaluate the current state of the program and improve ARIE Program's impact on medical student perception on children with developmental disabilities and improve comfortability interacting with them.
- Available pre-program data suggests that pre-clinical students at WSUSOM have a positive perception of individuals with disabilities at baseline. However, further analysis of this data should be completed to understand the differences that may exist between first- and second-year medical students.
- Based off participant anecdotes and coordinator experiences, the ARIE Program's virtual format may hinder communication between students and families due to variations in the child's ability to communicate via video conference, attention span, and technical difficulty. In the future, a return to in-person activities may facilitate richer conversations, stronger relationships, and more meaningful learning experiences.

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