

A Comparison of How Adolescent Patients and Their Parents Rate Communication by Pediatric Resident Physicians

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Abstract

Background: There are unique challenges in caring for the adolescent population, including communication in a way that is effective for both the adolescents and their parents or caregivers. While we assume that both are seeking similar qualities in their resident doctor, we sought to determine if a difference exists between adolescents and their parents in the judgment of adequate physician communication. This may offer insight into what each population values most in the skill set of their provider and may guide future pediatric resident education. **Methods:** We used the validated Communication Assessment Tool to survey adolescent patients (ages 11 – 17) and their respective parents about resident communication skills at the Phoenix Children’s Hospital and Maricopa Medical Center Adolescent Clinics. **Results:** Analysis of 30 parent/adolescent pairs found that of the fourteen questions on the survey, there was a statistically significant difference in responses on only two topics: (1) Greeted me in a way that made me feel comfortable and (2) Treated me with respect. With regards to the other 12 topics surveyed, however, there was no statistical difference in the ratings between adolescent patients and their respective parents. **Conclusion:** These findings suggest that in this small sample study, adolescent patients and their parents are, overall, quite similar in quantitative evaluation of resident interpersonal and communication skills

Introduction

- Adolescents (ages 10-19) constitute approximately 13% of the US population
- Pediatric residencies are mandated to provide a month-long training in treating adolescent patients, but pediatric physicians continue to feel poorly prepared to care for this population
- We sought to assess the patient feedback of adolescent patients and their respective parent or caregiver on pediatric resident communication skills from a single clinical encounter
- We hypothesized that these distinct populations would evaluate the interpersonal skills of their resident physician similarly
- This information may help strengthen pediatric residency curricula and the physician-adolescent relationship

Methods

- Study population: adolescent patients (ages 11 – 17) and their respective parents or caregivers following a single clinical encounter with a pediatric resident physician
- Survey tool: Pediatric-Patient/Family Feedback Tool (P-PFT), a variation of the validated Communication Assessment Tool
- Settings: Adolescent Clinics at Phoenix Children’s Hospital and Maricopa Medical Center
- Participants rated their resident doctor on 14 distinct interpersonal and communication elements

Methods (continued)

- The Wilcoxon Rank Sum Test was used to compare scores between the entire adolescent and parent/caregiver populations and between individual dyads
- Subgroup analysis was also performed to examine the data when survey responses are grouped by patient gender and by primary language of patient and parent

Results

- Thirty pairs of surveys were able to be obtained at both adolescent clinics
- Of all 14 communication skills surveyed, there was a statistically significant difference in the responses for ‘Greeted me in a way that made me feel comfortable’ and ‘Treated me with respect’ - both when comparing the pooled responses of all adolescents versus parent/caregiver populations and with individual dyads (see Table 1)
- Adolescent responses grouped by gender: males more positively rated their resident doctors in the areas of ‘Understood my health concerns’ and ‘Gave me as much information as I wanted’ (see Figure 1)
- Adolescent responses grouped by primary language: English-speakers rated their resident doctors more positively in the areas of ‘Checked to be sure I understood everything’, ‘Showed care and concern’, and ‘Spent the right amount of time with me’ (see Figure 2)
- Parent/caregiver responses grouped by primary language: no statistically significant difference in survey responses (see Figure 3)

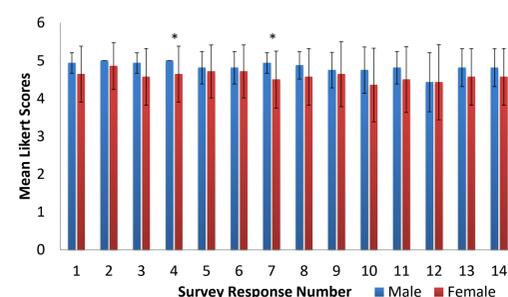


Figure 1: Adolescent-only responses grouped by gender. The brackets around the mean values represent the standard deviation. A star above the measurement signifies statistical significance in a survey response between groups

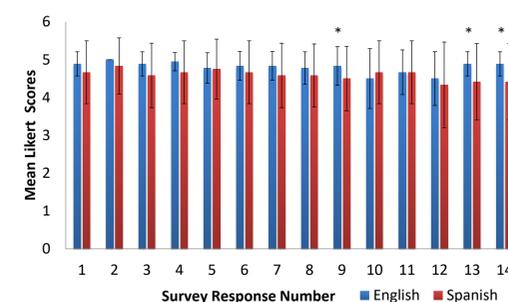


Figure 2: Adolescent-only responses grouped by primary language. The brackets around the mean values represent the standard deviation. A star above the measurement signifies statistical significance in a survey response

Survey Questions	Overall N=60	Adolescent N=30	Parent/ Caregiver N=30	P-value ¹	P-value ²
	Mean (SD)	Mean (SD)	Mean (SD)		
(1) Greeted me in a way that made me feel comfortable.	4.55 (0.74)	4.30 (0.88)	4.80 (0.48)	0.009	0.02
(2) Treated me with respect.	4.80 (0.51)	4.67 (0.61)	4.93 (0.36)	0.015	0.02
(3) Showed interest in my ideas about my (child's) health.	4.73 (0.57)	4.70 (0.65)	4.76 (0.50)	0.89	0.88
(4) Understood my (child's) main health concerns.	4.73 (0.57)	4.63 (0.67)	4.83 (0.46)	0.18	0.19
(5) Paid attention to me (looked at me, listened carefully).	4.73 (0.57)	4.70 (0.53)	4.76 (0.50)	0.56	0.58
(6) Let me talk without interruptions.	4.70 (0.57)	4.63 (0.61)	4.76 (0.50)	0.36	0.39
(7) Gave me as much information as I wanted	4.67 (0.65)	4.60 (0.77)	4.73 (0.52)	0.66	0.53
(8) Talked in terms I could understand.	4.65 (0.68)	4.57 (0.82)	4.73 (0.52)	0.61	0.49
(9) Checked to be sure I understood everything.	4.61 (0.67)	4.53 (0.73)	4.70 (0.59)	0.35	0.40
(10) Encouraged me to ask questions.	4.56 (0.69)	4.57 (0.67)	4.56 (0.73)	0.79	0.66
(11) Involved me in decisions as much as I wanted.	4.65 (0.63)	4.63 (0.67)	4.66 (0.61)	0.93	0.80
(12) Discussed next steps, including any follow-up plans.	4.51 (0.79)	4.58 (0.82)	4.43 (0.77)	0.27	0.41
(13) Showed care and concern.	4.70 (0.67)	4.70 (0.74)	4.70 (0.59)	0.61	0.67
(14) Spent the right amount of time.	4.61 (0.73)	4.53 (0.86)	4.70 (0.59)	0.61	0.63

Table 1: Survey Questions with Mean Response Entries using Likert scale 1-5 (1=poor and 5=excellent). P-Value¹ refers to the Wilcoxon Rank-Sum to compare between Adolescents and Parent Population measurements. P-Value² refers to the Wilcoxon Sign Rank to compare between each child's response and their respective parent's response. Questions 1 and 2 reached statistical significant differences between adolescent and parent populations (p<0.05)

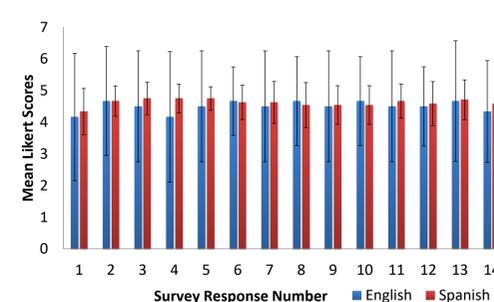


Figure 3: Parent-only responses grouped by primary language. The brackets around the mean values represent the standard deviation. A star above the measurement signifies statistical significance in a survey response

Discussion

- Our data suggests that, on a majority of topics (12 of 14 interpersonal skills), adolescents and their respective parents rate their resident doctor similarly with regards to communication skills
- These findings suggest that perhaps future pediatric resident physicians should use the same approach when engaging both adult and adolescent populations interpersonally
- Subgroup analysis of adolescent responses showed that male participants rated their resident doctor more highly than their female counterparts in areas of understanding health concerns and providing adequate information during the interview, however, both genders evaluated their resident doctor without any statistically significant difference on 12 of 14 skills surveyed
- Subgroup analysis of adolescent responses grouped by primary language showed English-speakers rating more positively in three responses, but no statistically significant difference in similar analysis of parents/caregivers when grouped by primary language - it is difficult to extrapolate the meaning of this data given that the language spoken by the resident doctor, either primarily or via an interpreter, was neither controlled nor reported in the study
- Limitations of the study:
 - ✓ Low volume of adolescent patients at our study sites
 - ✓ Large number of adolescents seeking care without a parent/caregiver present
 - ✓ Lack of patient score variability, possibly suggesting an unfamiliarity with Likert-scale surveys or a bias of patients viewing physicians as authority figures and defaulting to rating physicians highly on such surveys
 - ✓ Majority of P-PFTs obtained at clinic locations with predominant Hispanic population, possibly leading to homogenization of survey responses

Conclusion

- Our findings suggest that in this small sample study, adolescent patients and their parents are, overall, quite similar in quantitative evaluation of resident interpersonal skills
- When grouped by gender, adolescent survey responses demonstrated a minimal amount of statistically significant difference in responses (2 of 14 skills) suggesting both genders evaluate their resident doctor similarly and should be engaged similarly by such physicians

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