

Pharmacists Rarely Counsel Children and Their Caregivers: Results from a 14-day Observational Study in Urban and Rural Community Pharmacies

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Background

- Prior studies of pediatric counseling in pharmacies have relied on self-report survey data from pharmacists.
- These studies estimated that pharmacist-to-child communication occurs ~30% of the time, even though 90% of pharmacists dispense pediatric prescriptions daily.

Objective

To characterize community pharmacists' interactions with children (ages 7-17) and their caregivers.

Methods

Setting: Three community pharmacies; 1 located in rural Western North Carolina and 2 located in urban Western Pennsylvania

Design: 14-day observational study (1 week in May and June)

Participants: All families who picked up a prescription for a child

Procedure:

- Pharmacy staff notified trained research assistants (RAs) each time a child's prescription was dispensed.
- RAs used an observation guide to document: 1) when the prescription was picked up; 2) who picked up the prescription; 3) who was counseled; 4) which pharmacy staff members interacted with the family; 5) pick-up location; 6) wait time; 7) how many questions the child or caregiver asked; and 8) caregiver gender.
- The child's age, gender, and medication information were obtained from the prescription.

Analysis:

- Medication indications were characterized as acute or chronic. Using Micromedex, medications were classified into common indication classes (e.g. mental health, infection, asthma/allergy, contraception).
- We dichotomized counseling behaviors as: 1= either child/caregiver received counseling and 0 = neither child/caregiver received counseling.
- SPSS was used to calculate descriptive statistics. Logistic regression examined predictors of whether the family received counseling ($\alpha=0.05$).

Results

Sample Characteristics (N=97)	n (%)
Child age (in years) Range: 7-17 years	12.5 (2.9)
Child gender- Male	46 (47%)
Caregiver gender- Female	67 (69%)
Location of pick-up	
Urban	78 (80%)
Rural	19 (20%)

Characteristics of the Pharmacy Visit

Characteristic	Mean (SD) or n(%)
Time of pick-up	
During school hours (9 a.m.- 3 p.m.)	44 (47%)
Not during school hours (after 3 p.m.-9 p.m.)	49 (53%)
Who picked up prescription	
Caregiver	66 (68%)
Child	3 (3%)
Both	28 (29%)
Who received counseling	
Caregiver	19 (20%)
Child	0
Neither	76 (78%)
Both caregiver and child	2 (2%)
Who interacted with the family	
Pharmacist	11 (11%)
Technician	7 (7%)
Neither	76 (78%)
Both	3 (3%)
Number of questions child/caregiver asked Range: 0-4	0.3 (0.7)

Regression Predicting Whether Family Was Counseled

Characteristic (N=87)	B	p
Child age (in years)	-0.28	0.01
Child gender - female	-0.74	0.20
Prescription type - refill	0.20	0.76
Prescription for chronic condition	0.05	0.94
Prescription picked up at urban pharmacy	-0.23	0.72

Prescription Characteristics

- 116 prescriptions were picked up by 97 families.
- 61% (n=71) of prescriptions were for chronic conditions; prescriptions for ADHD/ADD (n=28; 24%) and depression (n=11; 9%) were most common.
- The most common prescription indications were for mental health conditions (n=44; 38%) and infections (n=31, 27%).
- Prescriptions for acute conditions were most likely to be antibiotics for treating infections (n=15; 13%) or allergy medications (n=10; 9%).

Limitations and Future Directions

- Generalizability is limited; observations took place in 3 pharmacies in 2 eastern states.
- We only observed pharmacies for 2 weeks; pediatric prescription filling behavior may vary throughout the year.
- We were unable to verify medication indications.

Conclusions and Future Directions

- Children infrequently accompanied their parents/caregivers to pick up their prescriptions.
- Children only received counseling 2% of the time and, in these instances, the child was counseled with their caregiver.
- Older children were less likely to receive counseling.
- Medications were most commonly dispensed for chronic mental health conditions.
- Studies that assess children's, caregivers', and pharmacists' perspectives on counseling are warranted to identify methods for increasing the frequency with which children are counseled by community pharmacists.

