Assessing Pediatric Medication Use Experiences and Patient Counseling in Community Pharmacies: Perspectives of Children

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INTRODUCTION
Children manage medicines despite little medication knowledge1
- Over six million children use medications to treat chronic conditions
- Children with chronic disease have a higher risk of drug therapy problems2-5
- Safe and effective use of medications by children is a growing patient safety concern

Little is known about the child-pharmacist relationship
- Children with chronic conditions have expressed an interest in being more involved in the management of their diseases6-8
- Children’s views of pediatric-pharmacist communication can help pharmacists understand how to educate children on medicines

OBJECTIVES
This study aimed to explore children’s perspectives regarding:
- Pediatric patients’ knowledge and medication use experiences for chronic conditions
- How they want to learn about medicines
- Perceptions of community pharmacist-provided counseling

METHODS
Recruitment
- Children aged 7 to 17 taking at least one medication for a chronic condition were recruited from three community pharmacies in two Eastern states

Study Design
- A semi-structured interview guide elicited children’s perceptions of medication use and counseling in the pharmacy

Data Collection and Analysis
- 20 interviews were conducted lasting approximately 20 minutes
- All interviews were audio-recorded and professionally transcribed
- Transcripts were reviewed for accuracy and a codebook was developed
- NVivo 10 software was used for content analysis and identifying prevalent themes

RESULTS

<table>
<thead>
<tr>
<th>Essential Medication Information and Sources</th>
<th>Information</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing Process</td>
<td>“Well, how’s it made or where it’s made, at first?”</td>
<td>Parent</td>
</tr>
<tr>
<td>Research Studies</td>
<td>“It would be cool and interesting to see how other people react to it. Like test studies for how other people react to it. And sort of more about how it affects the body.”</td>
<td>Physician</td>
</tr>
<tr>
<td>History</td>
<td>“Where it comes from, how it’s made, who invented it.”</td>
<td>Internet</td>
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Use of Interactive Technologies
- “I don’t think I would read that because there’s always those pamphlets around, and they never really look interesting, so I guess if it looked cool I might take a look at it.”
- “I would use the iPad because I think it’s kind of interesting. It would be—instead of the sheet of paper, capture my mind more.”
- “Because whenever I’m just standing around waiting for my mom to get something, I would watch the TV in the mall, so I feel like that would work, too.”

Other Relevant Themes
- Patient counseling needs and recommendations
  - “You could just talk to them [the pharmacist] and ask them all the questions you wanted, and they could give you all the information. They would ask you questions like if you want to learn this or learn that.”
  - “Children are frequently absent from the pharmacy upon pick-up
  - “I don’t pick up my medicine, so I’ve never really seen my pharmacist.”
- Perceptions of community pharmacists
  - “If I was introduced to him [the pharmacist] I’d be pretty comfortable.”

CONCLUSIONS
- Pharmacists are accessible healthcare professionals who are able to counsel children on the use of medications10
- Study findings revealed that children rarely interact with pharmacists largely due to their absence at pick-up
- Pharmacists should use interactive educational tools such as an iPad or a TV to counsel children on medicines to improve their knowledge and self-management practices

FUTURE RESEARCH
Further research is warranted to:
- Develop developmentally appropriate interactive technologies for children that can be implemented by community pharmacists
- Assess acceptability of using interactive technologies and other tailored approaches to increase community pharmacists’ provision of pediatric medication counseling

REFERENCES
1. Dimatteo MR. The role of effective communication with children and their families in fostering adherence to pediatric regimens. New York, NY: Springer Science & Business Media; 2009