Community Pharmacist–Child Medication Communication: Magnitude, Influences, and Content

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ABSTRACT

Objective: To describe community pharmacist–child medication communication with respect to its magnitude, influences, and content.

Design: Cross-sectional descriptive study.

Setting: Indiana.

Participants: 460 community pharmacists.

Intervention: Mailed questionnaire was used for data collection. Sections included: (1) pharmacists' practice of medication communication with children and with adults; (2) factors influencing the pharmacist's decision to communicate with children about medications; (3) elements of pharmacist–parent and pharmacist–child communication; and (4) demographics.

Main Outcome Measure: Daily percentage of children to whom pharmacists talked directly about medications.

Results: Response rate was 44.7% with no indications of nonresponse bias. Most respondents were staff pharmacists in chain pharmacies. On average, pharmacists reported engaging in communications about medications with 20.7% of children and 57.0% of adults on a daily basis ($t = 23.5$, $P \leq .0001$). Experience as a preceptor and prescription volume significantly influenced the frequency of pharmacists' communication with either adults or children. Pharmacists provided more medication information to parents than to their children, and more medication information to older children than to younger children. Children of all ages were likely to be comforted and given information about the medicine's taste.

Conclusion: Preliminary insights into the interaction between pharmacists and child patients are provided by this study. Considering the relatively low frequency of pharmacist–child communication, interventions aimed at influencing the child's and caregiver's motivation to seek information about the child's care, and improving pharmacist's knowledge about children's cognitive development at various ages may enhance the involvement of children in self-treatment.

Keywords: Communication, pediatrics, children, counseling.

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Children consume a high volume and a wide variety of both prescription and nonprescription medications. A survey of hospitalized children revealed that almost all of the children (97.5%) were given nonprescription medications within a 6-month period prior to their admission.[1] A nationwide survey indicated that about 54% of 3-year-old children were medicated by their parents during the previous 30 days.[2] In another study, 32% of 300 children 8 to 13 years reported using at least one medicine in a 48-hour period, and 43% of their mothers reported that their children had done so.[3] Furthermore, a number of children suffered from one or more chronic conditions that required regular medications and frequently took responsibility for their own medications at an early age. A survey of children with asthma revealed that 7% and 17% of 5- and 6-year-old children, respectively, were given self-medication responsibility, and more than 50% of children 9 years or older took medicines independently.[4] International studies supported by the European Union also have shown showed that children with asthma were highly autonomous in taking care of their condition and medicines.[5]

Unfortunately, the extent to which a medicine is taken as prescribed among children is inadequate. The reported rates of adherence range from 7% to 89% for short-term medication regimens and 11% to 83% for long-term ones.[6] Nonadherence is common for both acute and chronic conditions. For example, only 7.3% of pediatric outpatients completely adhered to their antibiotic regimen for treatment of acute otitis media.[7] Furthermore, studies have shown adherence rates between 22% and 59% for pediatric patients suffering from asthma, rheumatoid arthritis, renal transplants, epilepsy, and cancer.[8] Nonadherence is costly from both therapeutic and economic perspectives. It was associated with deteriorated health outcomes, and needlessly increased health care utilization and health care expenditures.[6,8,9]

Direct communication between health professionals and children is cited as one of the potential strategies to address the nonadherence problem among pediatric population.[8] Effective professional–child communication has been shown to improve therapeutic adherence and outcomes, and children can be a productive part of this interchange. Visintainer and Wolfer[10] found that children who received detailed information about tonsillectomy expressed significantly more cooperation with several surgery and post-surgery processes and less need for medications than those who did not. In another study, children receiving a communication intervention designed to enhance their competence and participation during medical visits recalled more medication recommendations, and reported greater satisfaction of care and preference for an active health role than those not receiving the intervention.[11]

Despite the extensive use and self-medication responsibilities among children, which requires them to be directly informed about their medications, as well as the evidence that professional communication results in several positive outcomes, documentation about the interaction between pharmacists and their child patients is limited. Most studies describing and evaluating professional interactions with children are emerging through work done by pediatricians. Limited data from a survey of pharmacists in Wyoming show that one third (33%) of the pharmacists claimed to communicate directly with child patients "most of the time," and the remaining reported doing so "some of the time" (32%) and or "rarely" (35%).[12] Though this study provides a general indication of the level of pharmacist–child interactions, the respondents might have differed considerably in their conceptualizations of the frequency response categories used. Furthermore, the content of the pharmacists' conversations with children cannot be determined from the available data. Children in one qualitative study indicated that physicians and pharmacists rarely talked to them about medications.[13] Research from pediatrics also reveals that much of the pediatrician–child communication involves social talk and laughter, with less medical information directed toward the children than the parents.[14]

National organizations, including the United States Pharmacopeia (USP)[15] and the National Council on Patient Information and Education,[8] place emphasis on encouraging pharmacists to directly address children. Establishing the extent to which the activity is being engaged in should be the first step for pharmacy leaders and/or educators in determining whether any educational or promotional programs or campaigns are needed.

AT A GLANCE

Synopsis: Community pharmacists do not interact frequently with child patients when they are present during dispensing, preferring to provide medication information to parents or caregivers. According to this survey of 460 Indiana community pharmacists, although 57% of pharmacists reported engaging in daily medication-related communications with adult patients, only 21% reported daily conversations with child patients. When they spoke with children, pharmacists most often provided information about the medication's taste.

Analysis: *Research has documented high use of prescription and nonprescription medications in children. Among children with chronic conditions that require one or more regular prescription medications, surveys have shown that children self-medicate at an early age; self-medication has been documented in children as young as 5 years. Medication nonadherence has been documented in children with both acute and chronic conditions. Direct communication with children is viewed as a way to increase medication adherence and improve health outcomes. National organizations, such as the United States Pharmacopeia and the National Council on Patient Information and Education, have encouraged pharmacists to communicate directly with children to improve therapeutic adherence, but this appears to occur infrequently.*