# Matching Anti-Seizure Medications' Formulations to Patients: Why It Matters!

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#### **OBJECTIVE**

To understand the healthcare provider (HCP) and parent/caregiver dialogue regarding swallowing challenges of anti-seizure medications (ASMs) in children with epilepsy.

#### **BACKGROUND**

Challenges swallowing oral medications among children have been shown to affect adherence to treatment. This survey is of critical importance for the practicing neurologist, as it addresses issues related to medication formulation availability how this may potentially impact seizure control. More specifically, this survey addresses one of the critical areas in treating epilepsy, namely patient adherence. It links adherence to medication formulation and backs the FDA concept of "Getting the right medication (or formulation in this case) to the right patient at the right time."

#### **DESIGN/METHODS**

Parents of children (2 to 25 years old) with epilepsy residing in the U.S. were recruited to participate in an online survey fielded using Qualtrics on discussing swallowing challenges and formulation options of ASMs with their HCPs. They were recruited using MyEpilepsyTeam, an online social network with 120,000+ epilepsy patients and caregivers that provides education and support.

#### This study was funded by Azurity Pharmaceuticals, Inc.

1. VandenBerg CJ, Adams A, Bockrath R, Kim S, Rodriguez G, Fawcett A, Jhaveri R. Hard to swallow: a review of interventions to improve swallowing solid medication. Hosp Pediatr. 2023;13(5):e123-e132. doi:10.1542/hpeds.2021-006497.

### **RESULTS**

The survey was completed by 105 parents of children who were diagnosed with epilepsy and taking prescription medication. Of these parents, 74.3% had never discussed formulation options with their HCPs (Figure 1). Among parents of 2 to 12 year olds and parents of 13 to 18 year olds, 61.3% and 78.4% of parents, respectively, never discussed different formulation options (Figure 2).

When asked whether the HCP had ever asked if their child had difficulty swallowing medication, 58.1% of all respondents said no or were unsure they were ever asked (Figure 3).

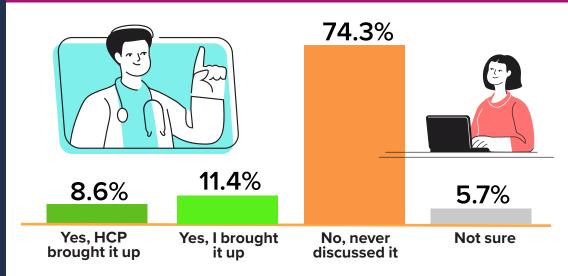
Parents affirmed low awareness and few discussions about formulation options, with only 34.3% of parents being aware of the availability of alternative formulations of ASMs (Figure 4).

Importantly, 1 in 3 reported that their child missed or skipped doses of ASMs because of challenges getting the child to take it (Figure 5). Among those, 58.1% reported skipping doses at least monthly, potentially

#### **CONCLUSIONS**

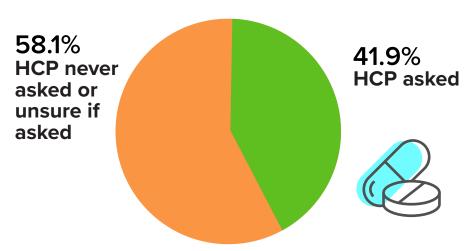
While efficacy, side effects, and drug interactions are typically discussed by the HCPs, swallowing difficulties and formulation options are not. Our findings suggest insufficient conversations between HCPs and parents regarding swallowing challenges and appropriate treatment options, which may have a negative impact on their child's epilepsy management.

## **Figure 1** Parent-HCP Discussions on Alternative Formulation Options



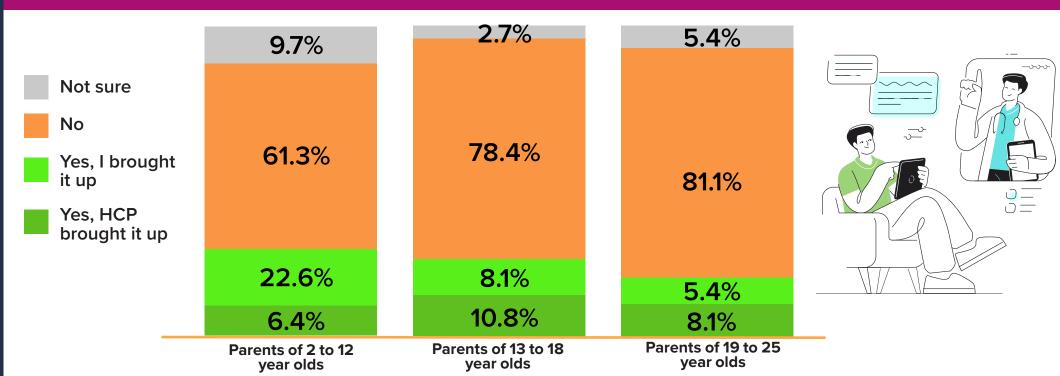
Question: Have you ever discussed with your child's HCP whether there is another option for taking their current medication(s) (e.g., switching from a pill to a liquid or chewable version)? (N=105)

## **Figure 3** HCPs and Asking About Trouble Swallowing Medication



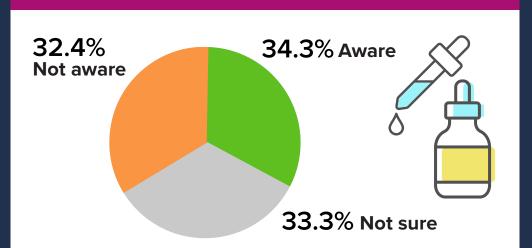
Question: Did the HCP ever ask you if your child has trouble swallowing medication? (N=105)

#### Figure 2 Parent-HCP Discussions by Age of Child



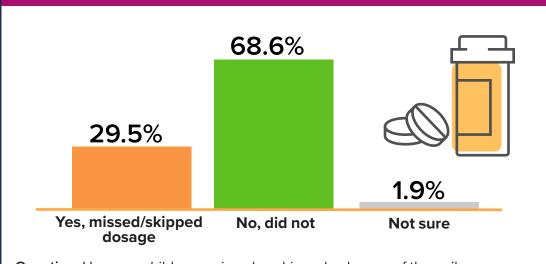
Question: Have you ever discussed with your child's HCP whether there is another option for taking their current medication(s) (e.g., switching from a pill to a liquid or chewable version)? (N=31, 37, 37)

### **Figure 4** Awareness That a Different Formulation is Available



Question: Do you know if your child's epilepsy medication is available in another form (e.g., pill, liquid, chewable, etc.) that is different from how they take it now? (N=105)

### Figure 5 Missed ASM Dosage Because of Challenges



**Question:** Has your child ever missed or skipped a dosage of the epilepsy medications because of challenges with getting them to take it? (N=105)