

Treatment Recommendations for Primary Herpetic Gingivostomatitis

Aarati Shah DMD, Kevin Benjumea DMD, Sumitra Golikeri DMD

BACKGROUND

Primary Herpetic Gingivostomatitis represents a child's initial exposure to HSV-1 and remains one of the most common viral oral infections in pediatric dentistry. The infection typically resolves within 7 to 14 days, but its painful nature can cause feeding difficulties and dehydration for young children and distress for the parents. Studies have shown that early antiviral therapy (initiated within 72 hours) may reduce symptom duration and severity, yet widespread disagreement persists on its necessity and timing. Understanding what treatment strategies pediatric dental providers recommend most often will help with standardizing care and improving patient education.

Objectives

Primary Herpetic Gingivostomatitis (PHGS) is a common viral infection that is often seen in the pediatric population. Although it is self-resolving, parents often present to the emergency room or come to the dental office when they notice their child presents with symptoms of PHGS. Dental providers often vary in their treatment recommendations, ranging from palliative treatment to antiviral therapy. The purpose of this study is to assess current treatment recommendations for PHGS among pediatric dental care providers in the United States and to consider factors that influence these decisions.

METHODS

A cross sectional study will be completed by sending anonymous online surveys through the American Academy of Pediatric Dentistry to licensed pediatric dentists and pediatric dental residents in the United States. The survey will evaluate provider demographics, clinical experience with PHGS, preferred treatment techniques and decision making factors related to use of antiviral therapy. Survey data will be analyzed to find trends and variability amongst providers that will aid in creating management strategies and promote consistency in care.

RESULTS

PRELIMINARY DATA (N = 162)

- **Provider Type:** Pediatric Dentists (86%), General Dentists (7%), Residents (6%).
- **Experience Level:** >10 years (61%), <3 years (17%), 3-6 years (12%), 7-10 years (9%).
- **Practice Setting:** Private Practice [Group/Solo] (79%), Hospital/Academia/CHC (21%).
- **Practice Area:** Suburban (59%), Urban (28%), Rural (13%).

Figure 1

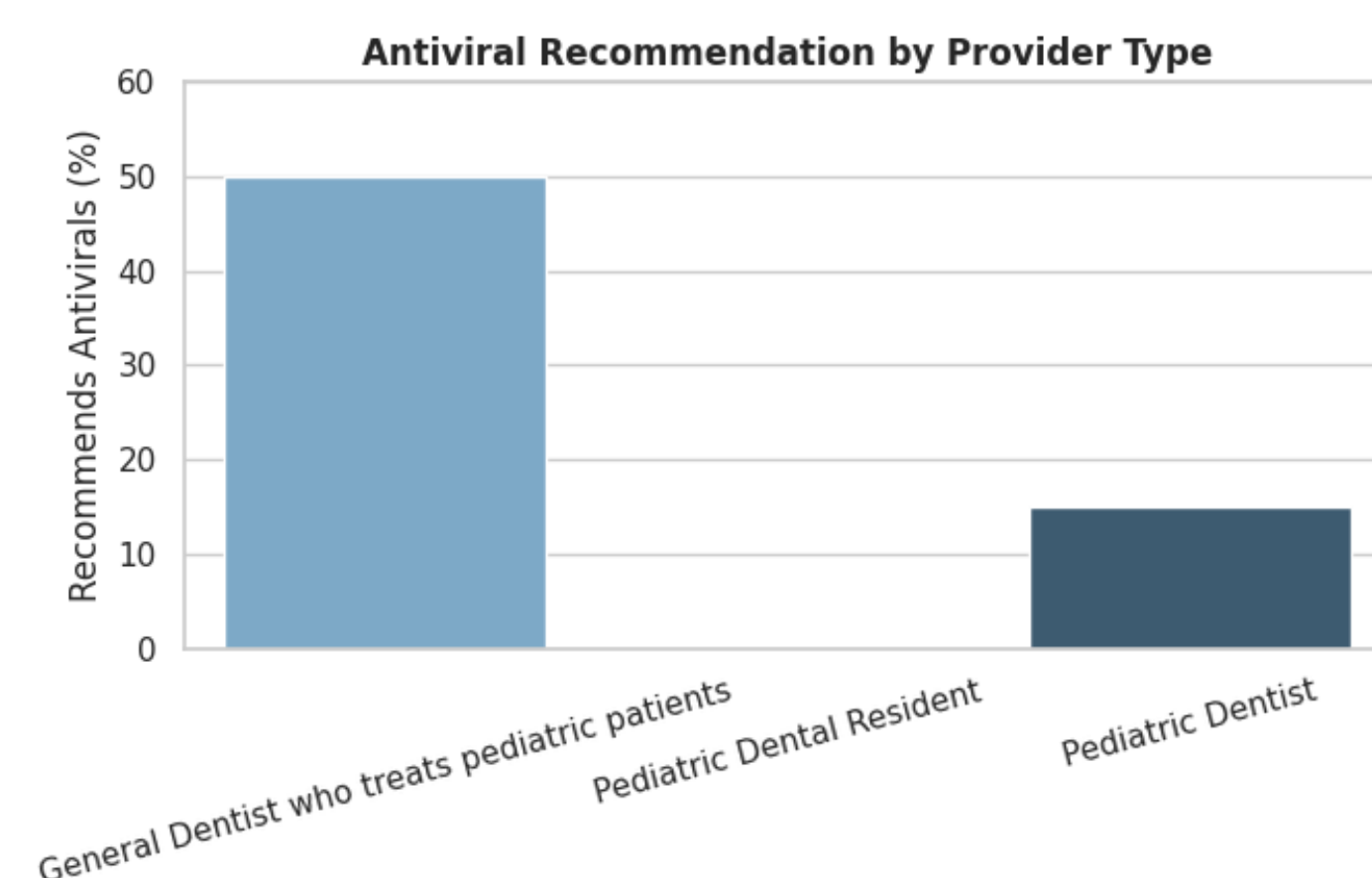


Figure 1 shows that general dentists treating pediatric patients are significantly more willing to prescribe systemic antivirals (50.0%) compared to pediatric dentists (15.0%) and pediatric dental residents (0.0%). P-value is 0.0026 and is statistically significant.

Figure 2

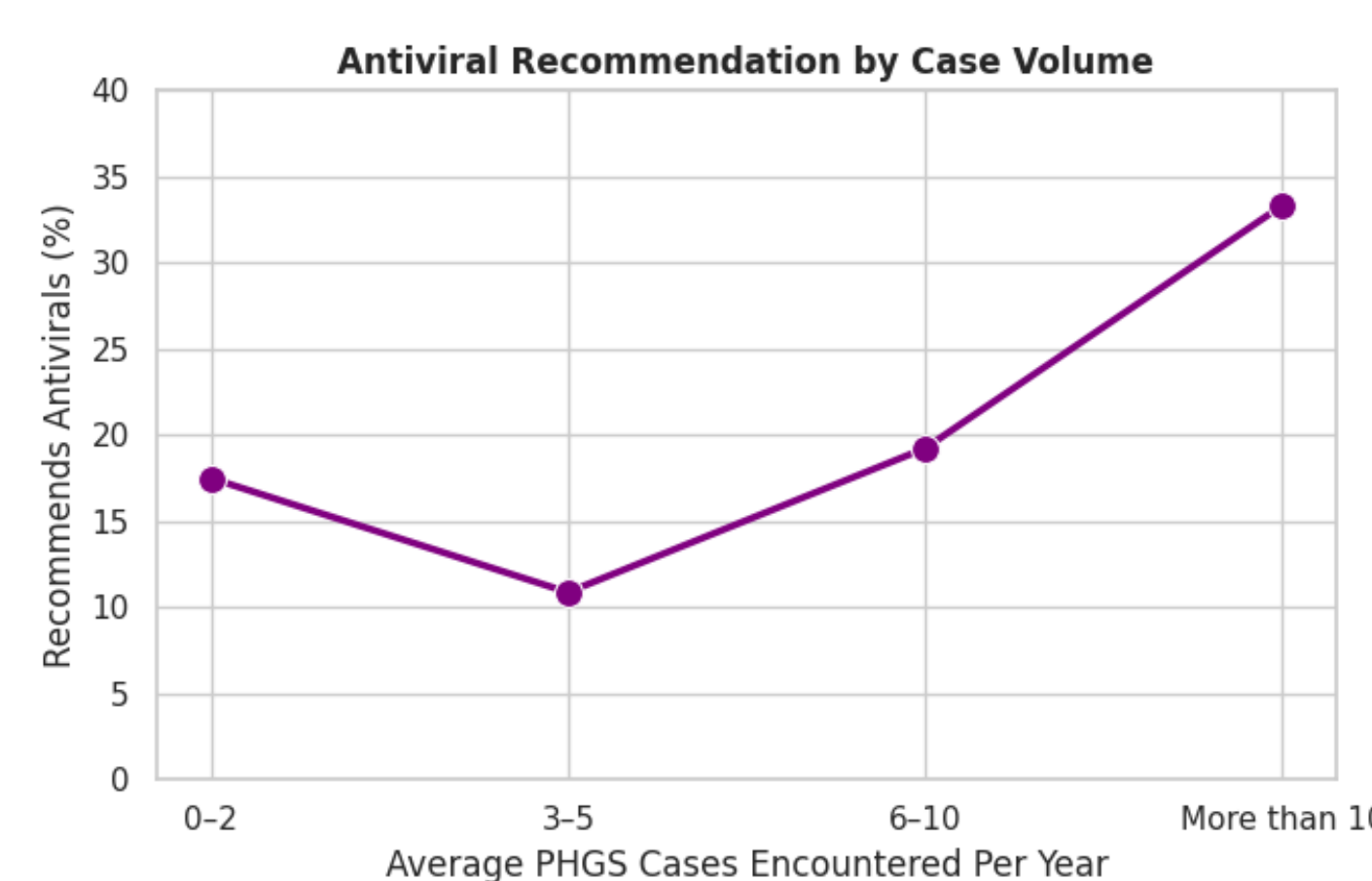


Figure 2 shows that prescribing anti-virals depends on the provider's case volume and forms a "J-shaped trend". Providers seeing moderate cases (3-5/year) are the most conservative (only 10.9% prescribe antivirals), while high-volume providers (>10/year) are three times more likely to intervene pharmacologically (33.3%).

Figure 3

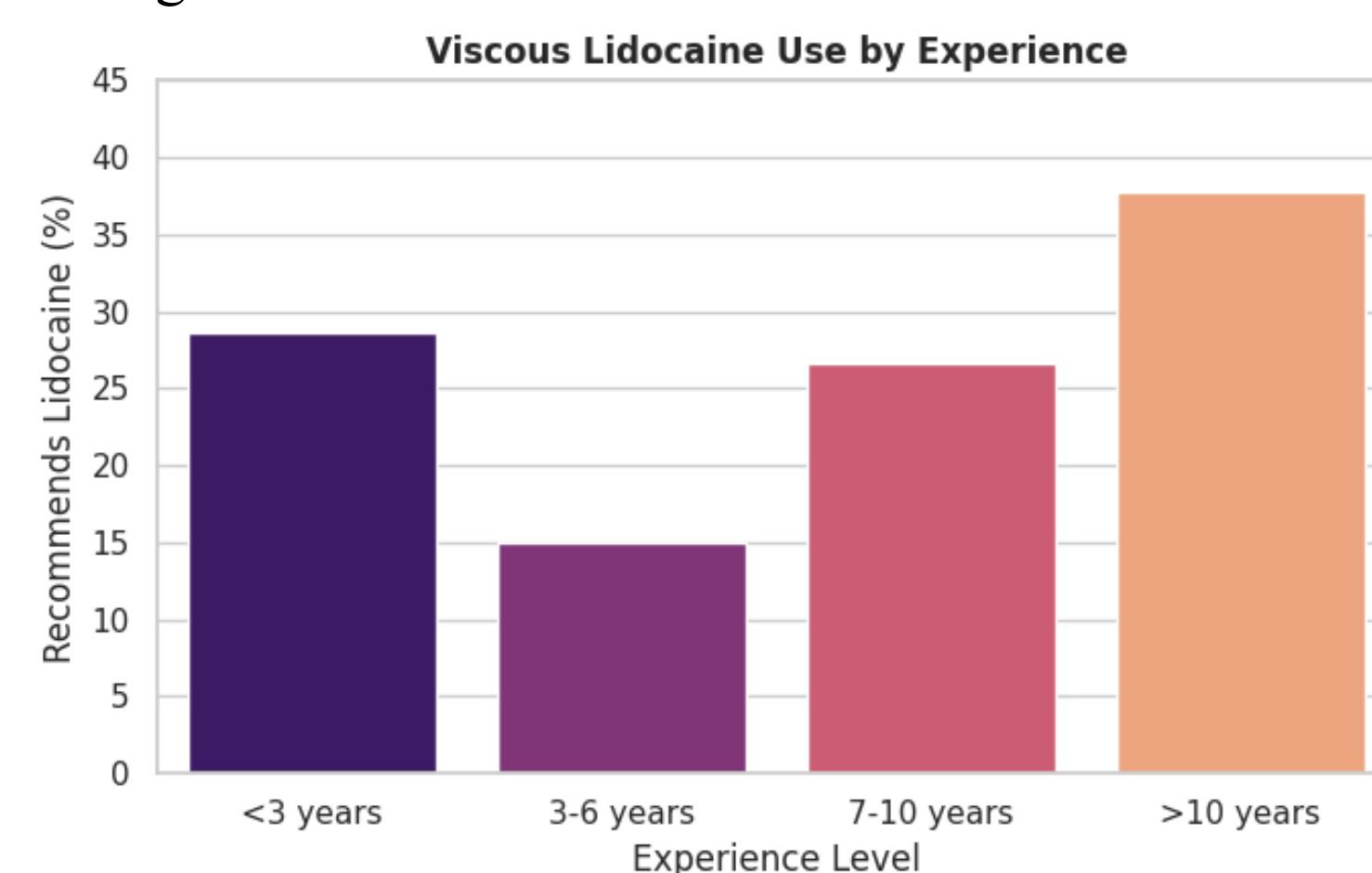


Figure 3 shows a "U-shaped" curve. There is a trend that those with the most experience (>10 years) (37.8%) and novices <3 years (28.6%), were more likely to recommend use of viscous lidocaine compared to those that were in their mid-career 3-6 years (15.0%).

Figure 4

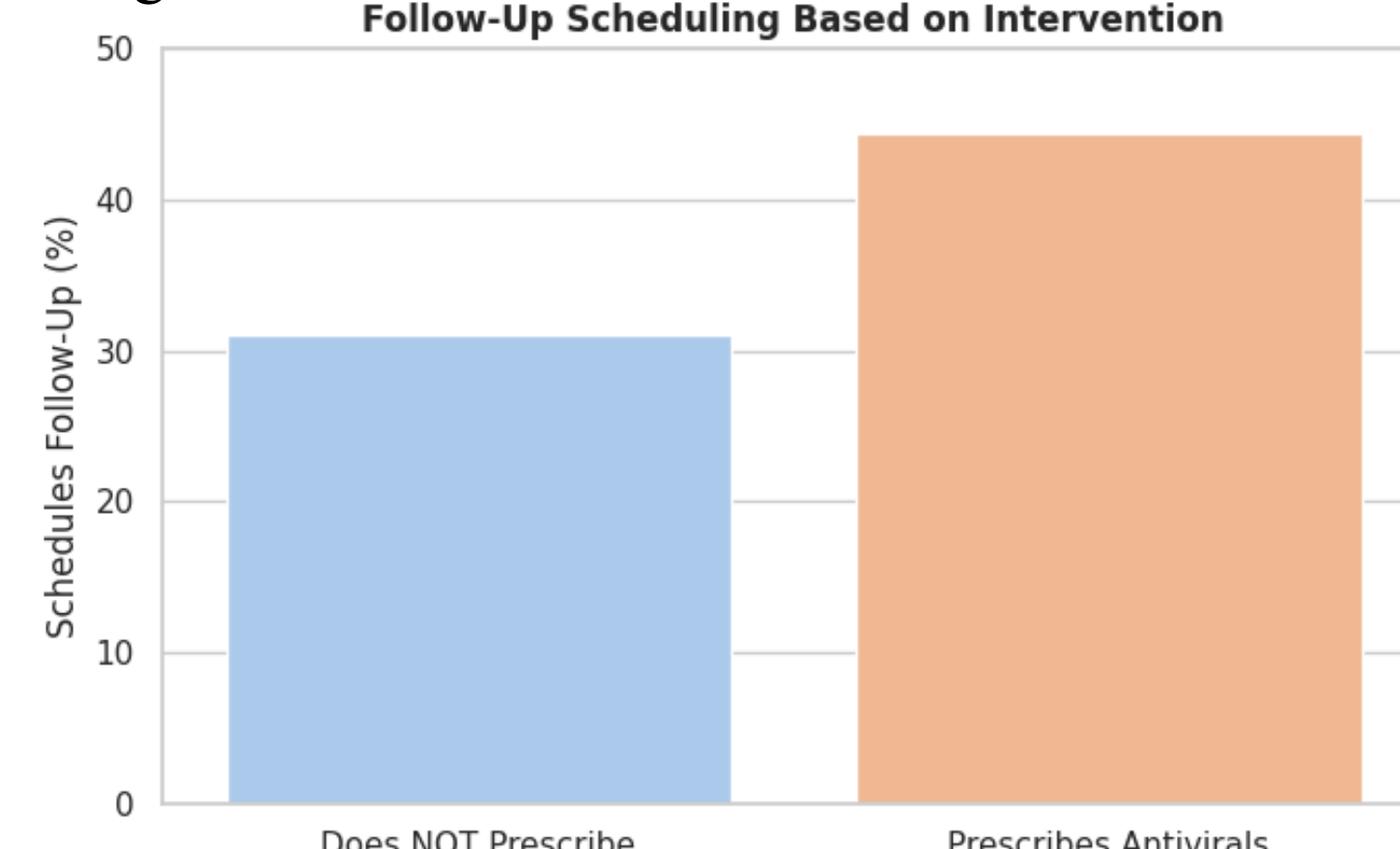


Figure 4 shows a trend that providers who prescribe systemic antivirals are much more likely to mandate a follow-up appointment (44.4%) than those managing the virus palliatively (31.1%).

DISCUSSION

Discussion: While palliative care remains the universal baseline for PHGS, some provider's are more willing to escalate to medical intervention. General dentists are significantly more willing to prescribe systemic antivirals compared to pediatric specialists and residents ($p = 0.0026$). This suggests that pediatric dentists may be more confident in knowing that PHGS is self-resolving (due to higher case volume), while general dentists may utilize pharmaceutical intervention to manage acute parental anxiety or unfamiliar pediatric pathology.

Beyond pharmacological intervention, the data reveals that medical referrals and follow up culture is heavily dictated by a provider's environment and chosen treatment path. Medical referral rates are setting dependent ($p=0.0253$), with providers in community health centers and academic hospitals referring patients to their physicians at significantly higher rates than private practitioners. This likely reflects the realities of treating medically complex populations within integrated healthcare systems, whereas solo practitioners often manage cases in the clinic to spare families an ER visit. Furthermore, when a provider *does* escalate to antiviral therapy, they inherently alter their risk profile, scheduling follow up appointments at much higher rates (44.4%) to monitor patient improvement. Ultimately, whether a provider feels comfortable stepping outside basic palliative care depends heavily on their specialized training, years of experience, and practice setting resources.

Study Limitations: Data relies on self-reported behaviors subject to recall bias; limited sample sizes in specific sub-groups (e.g., residents, CHCs, general dentists).

Future Directions: To broaden our understanding of PHGS management, future studies should survey pediatricians and pediatric emergency medicine physicians to see how frequently they encounter these cases in the hospital and private practice settings. Comparing their treatment protocols to our dental data would clarify whether our medical colleagues are more aggressive with prescribing systemic antivirals or if they also rely heavily on baseline palliative care. Additionally, future dental research should utilize more complex surveys that are able to represent different severities of PHGS rather than general behavioral questions. Presenting providers with specific case studies ranging from mild localized lesions to severe systemic involvement with dehydration would help determine if intervention rates are truly driven by a provider's training background or simply by the objective severity of the cases walking through their door.

KEY POINTS

- Increase in exposure may grant providers the clinical confidence to step outside palliative-only care, or they may serve as regional referral hubs for unusually severe cases PHGS that warrant medical intervention.
- While follow-ups for a self-limiting disease are technically optional, providers who prescribe anti-viral therapy followed by newer practicing dentists are more likely to follow up.
- General dentists are more willing to prescribe anti-virals in comparison to pediatric dental residents and pediatric dentists.
- There is a non-linear trend for recommending viscous lidocaine as a form of management for PHGS. Veterans are more likely to recommend usage of viscous lidocaine (based on old school teaching) while new grads may be overcompensating to provide immediate, tangible relief. Conversely, mid-career dentists remain highly conservative, directly reflecting the FDA lidocaine toxicity warnings issued during their dental school and residency years.

REFERENCES

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